Closure of the procedure in respect of application No. 00944619.6 - 1247 20.01.06

1. The procedure in respect of the above application is closed for the following reason:

✓ADWI 09/11.10.05 - The time limit under Rule 69(2) EPC has expired.
No request/application under R 69(2), or Art. 121 or 122 EPC has been filed.

2. The following EPASYS situation has been verified relative to point 1 and 3:

DFIL: 02.06.00
NOAP: ////
RDEC: ////

RFPR: 24.11.03/24.11.03/3
REES: ///()

REFU 3 / ADWI 3 and DEAD were coded on 31-01-2006.

3. Position regarding fees:

DEST03	005	00902336	13.12.01	EUR	532,00
EXAM02	006	00902336	13.12.01	EUR	715,50
RFPR02	012	00587892	24.11.03	EUR	75,00
CLMS(2)	015	00902336	13.12.01	EUR	1 800,00
CLMS(2)	015	00925837	08.11.02	EUR	1 040,00-
FFEE01	020	00902336	13.12.01	EUR	127,00
RFEE 03	033	00735004	24.06.02	EUR	380,00
RFEE 04	034	00357256	23.06.03	EUR	405,00

Costs verified. Refund(s) ordered on _____.

☐ **Exam fee refund ordered.**

4. Any models still in the Office's possession were returned on _____ (for dealing with models, please refer to fil d'Ariane).
5. Submit dossier to the Primary examiner only if there is a request for feedback in the dossier.
6. Mark "DEAD" and:
   - send paperfile to central archives for non PHX files
   - keep PHX paper file in file store (sep. place) until next action for file destruction.

31-01-2006
Date

Dubret, Françoise
Formalities Officer

To primary examiner for information: Giannotti P room S10C09

P.B.5818 - Patentlaan 2
2280 HV Rijswijk (ZH)
(070) 3 40 20 40
FAX (070) 3 40 30 16

Europäisches Patentamt	European Patent Office	Office européen des brevets
Generaldirektion 1	Directorate General 1	Direction générale 1

Iviewit Holdings, Inc.
One Boca Place,
2255 Glades Road,
Suite 337 West
Boca Ralton, FL 33431
ETATS-UNIS D'AMERIQUE

EPA EPO OEB
tel.: (070) 3404616
26 OCT 2005
Mailroom I

EPO Customer Services
Tel.: +31 (0)70 340 45 00

Date 11-10-2005

Reference	Application No./Patent No. 00944619.6 - 1247
Applicant/Proprietor Iviewit Holdings, Inc.	

Noting of loss of rights (R. 69(1) EPC)

The European Patent application is deemed to be withdrawn under Article 86(3) EPC.

The renewal fee for the 5 year and the additional fee have not been paid in due time / not been paid in full in due time.

Request for decision
If the applicant considers that this finding is inaccurate, he may, within (a non-extendable period of) **two months** after notification of this communication, apply in writing for a decision on the matter by the European Patent Office (R. 69(2) EPC). The application can only lead to the finding being reversed, if this does not actually correspond to the factual or legal situation.

Application for re-establishment of rights
If the applicant, in spite of having taken all due care required by the circumstances, was unable to observe the time limit, he shall on application have his rights re-established providing he meets the time limits and formal requirements under Article 122 EPC.

Examining Division

Europäisches Patentamt • European Patent Office • Office européen des brevets

Europäisches Patentamt
European Patent Office
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P.O. Box 5818
2280 HV RIJSWIJK (ZH)
Niederlande/Netherlands/Pays-Bas

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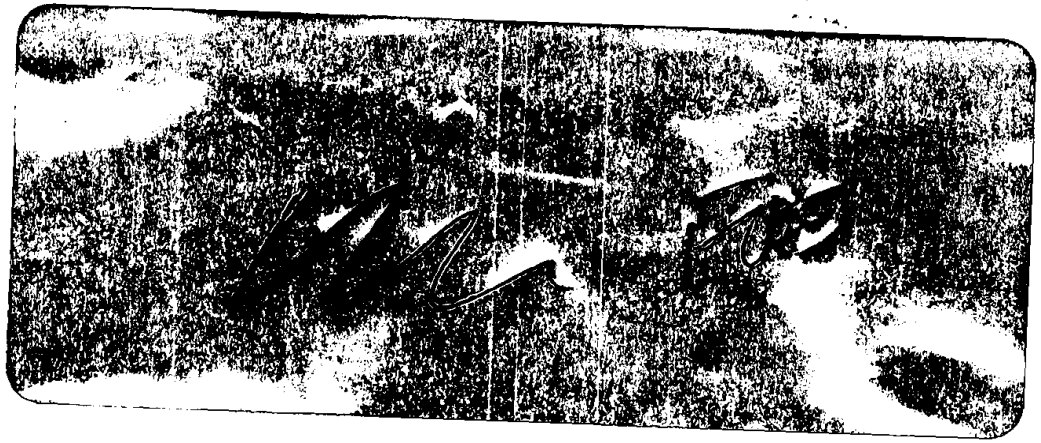

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tel.: (070) 3403207

25 OKT. 2005

W. Gordijn

10/18

C.4d

Aangetekend

Recommandé
NL

3S ROEB 1412406

3SRAMS2253573

4.112A

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Boca Ralton, FL 33431
ETATS-UNIS D'AMERIQUE

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Tel.: +31 (0)70 340 45 00

Date 11-10-2005

Reference	Application No./Patent No. 00944619.6 - 1247
Applicant/Proprietor Iviewit Holdings, Inc.	

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ETATS-UNIS D'AMERIQUE

28 SEP. 2005

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Tel.: +31 (0)70 340 45 00

Date 24-08-2005

Reference	Application No./Patent No.
	00944619.6 - 1247
Applicant/Proprietor: Iviewit Holdings, Inc.	

Noting of loss of rights (R. 69(1) EPC)

The European Patent application is deemed to be withdrawn under Article 86(3) EPC.

The renewal fee for the 05 year and the additional fee have not been paid in due time / not been paid in full in due time.

Request for decision
If the applicant considers that this finding is inaccurate, he may, within (a non-extendable period of) **two months** after notification of this communication, apply in writing for a decision on the matter by the European Patent Office (R. 69(2) EPC). The application can only lead to the finding being reversed, if this does not actually correspond to the factual or legal situation.

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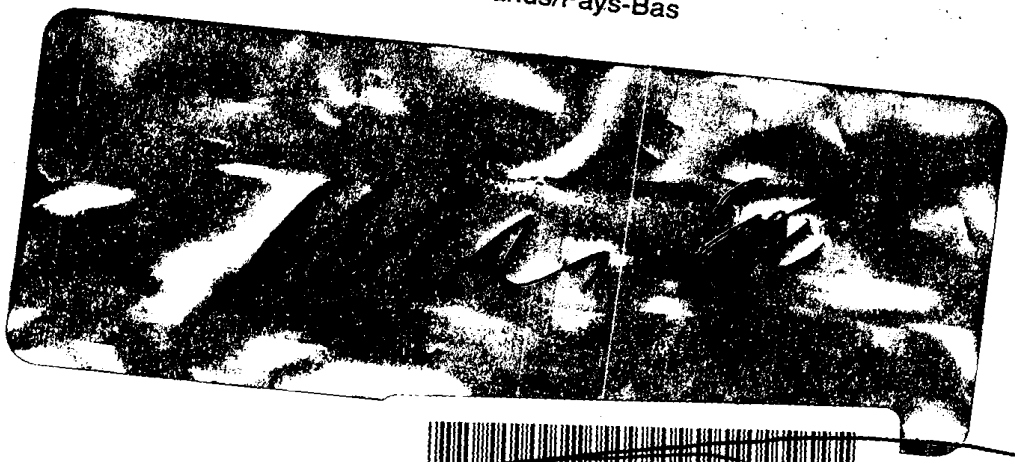

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Suite 337 West
Boca Ralton, FL 33431
ETATS-UNIS D'AMERIQUE

EPO Customer Services

Tel.: +31 (0)70 340 45 00

Date 24-08-2005

Reference	Application No./Patent No. 00944619.6 - 1247
Applicant/Proprietor Iviewit Holdings, Inc.	

Noting of loss of rights (R. 69(1) EPC)

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Tel.: +31 (0)70 340 45 00

Date
03.08.05

Reference	Application No./Patent No.
	00944619.6 - 1247 PCT/US0015405
Applicant/Proprietor	
Iviewit Holdings, Inc.	

Notice drawing attention to Article 86(2) EPC, Art. 2 No. 5 of the rules relating to fees
- Payment of the renewal fee plus additional fee -

The renewal fee for the 06. year fell due on 30.06.05 unless this date falls within the period covered by an interruption of the proceedings in accordance with Rule 90(1) EPC.

The amount of the renewal fee on that date was **EUR 715,00** (see OJ EPO 2001, 374, 377, 378, and 543).

The renewal fee was not paid by the due date.
The renewal fee may still be validly paid **up to the last day of the sixth calender month** following the due date, provided that the additional fee (10% of the renewal fee) is paid at the same time.

Within the above period which cannot be extended the following fees are to be paid:

Renewal fee for the 06. year:	EUR	715,00
Additional fee:	EUR	71,50
TOTAL AMOUNT	EUR	786,50

If the renewal fee and the additional fee are not paid in due time, the European patent application shall be deemed to be withdrawn (Art.86(3) EPC).

Note to users of the automatic debiting procedure:
The normal time limit for payment of the above renewal fee had already expired when the automatic debit order was received. The renewal fee and the surcharge will be debited automatically on the last day of the period of grace (Supplement to OJ EPO 2/1999; OJ EPO 2000, 62).

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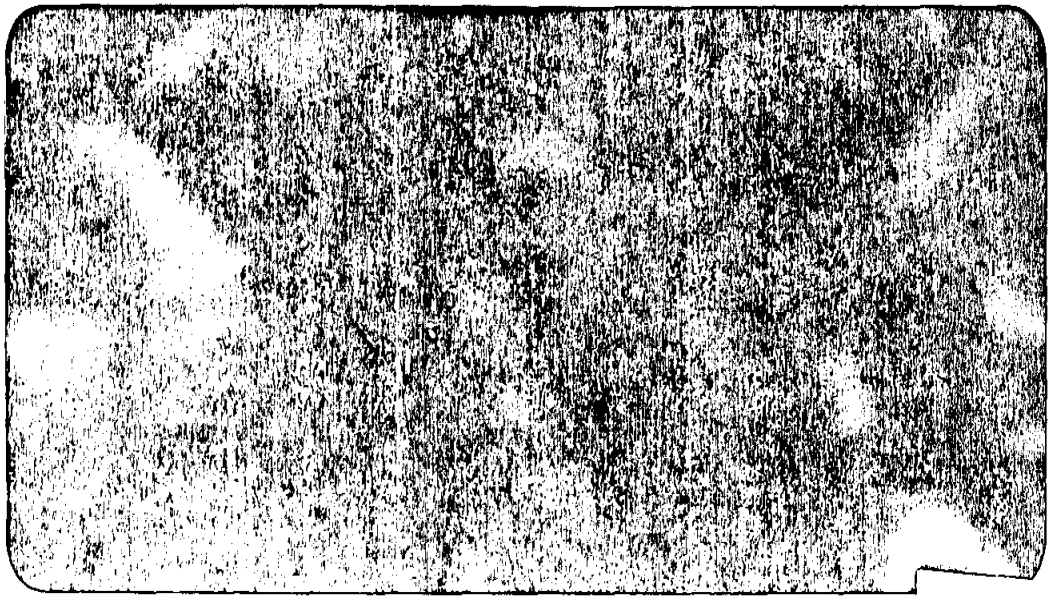

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19 AUG. 2005

J. Verhaar

33431+7382

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Date
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+49-89/2399-0
Tx 523 656 epmu d
Fax +49-89/2399-5148

Durchwahl/Direct dial/
Ligne directe:

5110

Zeichen/Reference/Référence

AD/LD

Datum/Date/Date

08.07.05

Iviewit Technologies, Inc.
Mr Eliot I. Bernstein
10158 Stonehenge Circle Suite 801
Boynton Beach,

USA - Fla. 33437 - 3546

Our Ref: **Legal R13-268/2004**
Applications : **00 944 619.6, 00 938 126.0, 00 955 352.0**
Applicant: **Iviewit Holdings, Inc.**
Your Ref: **Your phone call from 20 June 2005**

Dear Mr Bernstein,

I herewith acknowledge receipt of your message on my answering machine where you requested the EPO to send you a copy of information contained in your file.

Please find enclosed a notice of information from the EPO concerning inspection of files published in the July edition of the Official Journal of the EPO.

I hope this information is helpful to you.

Yours sincerely,

Lise Dybdahl
Director

EPA/EPO/OEB Form 51002 06.03

Hauptsitz/Headquarters/Siège
Erhardtstraße 27
D-80331 München

EP

Official Journal

07 2003

July Year 26 Pages 319 - 384

INFORMATION FROM THE EPO

Notice from the European Patent Office dated 6 June 2003 concerning the inspection of files

Through epoline®, the EPO has extended its range of patent information services and established Internet access to electronic files.

Following publication of a European patent application, anyone may inspect the associated file online at:

www.epoline.org/onlinefileinspection.htm or

www.epoline.org/ofi.htm

1. Online **File Inspection**

1.1 Online **File Inspection** provides users with direct access to all published European patent applications and patents that are stored in electronic form.

1.2 If you enter a valid application or publication number and click on the folder icon, all the documents in the public part of the file are listed, sorted by date, in the form of a "table of contents". By clicking on the link for a document you can display its image in a viewer and print it if you so wish. By checking the box next to a document you can select it for download to your PC. You can also select all the documents at once by clicking on "Select all documents".

1.3 If you request inspection of a file that is not yet stored in electronic form, the file will as a rule be made available online within ten working days of entry of the application or publication number, unless it has already been destroyed (Rule 95a(4) and (5) EPC). This does not apply to files with regard to which oral proceedings are imminent or have recently taken place. Entering a valid application or publication number is equivalent to requesting a **file inspection**. There is no need for a separate written request.

1.4 Online **File Inspection** is available from 08.00 to 18.00 hrs CET.

1.5 With the advent of free online **file inspection**, it is as a rule no longer possible to inspect the paper files on the premises of the EPO.

2. **File inspection** on paper copies

2.1 If you request **file inspection** on paper copies, you must pay an administrative fee of EUR 30 in advance. As a rule, if more than 100 pages have to be produced, you are provided with an electronic storage medium holding a copy of the file. If you expressly request paper copies instead of an electronic storage medium, an additional charge of EUR 0.30 per page is levied for each page in excess of 100. The invoice for the additional charge is sent together with the **file inspection** documents.

2.2 It should be noted that electronic storage media and paper copies for **file inspection** typically cannot

be made available until at least four weeks after receipt of the **file inspection** request.

3. Telephone enquiries about Online **File Inspection**

These are answered by EPO Customer Services.

European Patent Office
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NL-2288 EE Rijswijk
Tel.: (+31-70) 340 4500
Fax: (+31-70) 340 4600
E-mail: epoline@epo.org
Internet: www.epoline.org

EPO Customer Services are available from Monday to Friday from 08.00 to 18.00 hrs CET.

---

1 See the President's decisions on the inspection of files and on revising the Office's fees and costs on pages 370, 371.

View/download the original article in the 3 languages in PDF format 

Search text: ***file inspection***
Document 1 of 27
Title: ***Official Journal EPO 07/2003 - INFORMATION FROM THE EPO - Notice from the European Patent Office dated 6 June 2003 concerning the inspection of files***

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Durchwahl/Direct dial/
Ligne directe:

Mr Eliot I. Bernstein
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10158 Stonehenge Circle
Suite 801
Boynton Beach, Fla. 33437-3546

U.S.A.

Zeichen/Reference/Référence

Legal R 13/268-2004

Datum/Date/Date

24. 05. 05

Dear Mr Bernstein,

Re,: Suspension of proceedings for European patent applications 00944619.6, 00938126.0 and 00955352.0

Ref.: Your e-mails to the Legal Division dated 25 February 2005 and to the President of the European Patent Office dated 28 February 2005

We thank you for your letter of 25 February 2005 and your letter dated 28 February 2005, addressed to the President of the European Patent Office which has been forwarded to the Legal Division for reasons of responsibility.

As far as the allegations against the European Patent Office are concerned we can confirm, after having given the utmost consideration to your case, that the proceedings were conducted in full accordance with the provisions laid down by the European Patent Convention.

However, should you not share the opinion of the Office in substance you are entitled to request an appealable decision of the competent department, which is subject to appeal with the Boards of Appeal of the European Patent Office.

EPA/EPO/OEB Form 51002 06.03

Hauptsitz/Headquarters/Siège
Erhardtstraße 27
D-80331 München

With regard to the various allegations you made against professional representatives before the European Patent Office, we would like to draw your attention to the fact that issues of conduct must be initiated with the Institute of professional representatives.

We hope that this information clarifies the situation and remain

Yours sincerely

Lise Dybdahl
Director

EPA/EPO/OEB
D-80298 München
+49 89 2399-0
TX 523 656 epmu d
FAX +49 89 2399-4465

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Generaldirektion 2 | Directorate General 2 | Direction Générale 2

Iviewit Holdings, Inc.
505 North Brand Boulevard,
Suite 1420
Glendale, CA 91203
ETATS-UNIS D'AMERIQUE

Datum/Date
11.3.05

Zeichen/Ref./Réf.	Anmeldung Nr./Application No./Demande n°./Patent Nr./Patent No./Brevet n°.
	00938126.0-1247 + 0994461 9.6

Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire
Iviewit Holdings, Inc.

Invitation to give notice of appointment of a professional representative

The authorisation of the previous representative has been terminated as a result of

[X] relinquishment of representation by the professional representative (see annex),

[ ] your withdrawal of the authorisation.

As a result the requirements of Article 133(2) EPC are no longer met.

According to Article 133(2) EPC natural or legal persons not having either a residence or their principal place of business within the territory of one of the Contracting States to the European Patent Convention must be represented by a professional representative (cf. Article 134 EPC) and act through him in all proceedings established by the Convention.

You are hereby requested to remedy the above deficiency (notice of appointment of a professional representative) within t h r e e months of notification of this communication.

If this invitation is not replied to in due time, the European patent application will be deemed to be withdrawn (Article 96(3) EPC).

Until the specified deficiency is remedied, you may not take any procedural steps in the opposition proceedings (Article 133(2) EPC).

Formalities Officer
Tel. No. (089) 2399- 2833

Annex:

REGISTERED LETTER

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TX 523 656 epmu d
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Einschreiben / Registered letter / Lettre recommandée

Iviewit Holdings Inc.
Mr Bernstein
10158 Stonehenge Circle Suite 801
US - Boynton Beach, FL 33437-3546

Datum/Date
11.3.05

Zeichen/Ref./Réf.	Anmeldung Nr./Application No./Demande n°./Patent Nr./Patent No./Brevet n°.
	00955352.0-1247 + 0094461 9.6

Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire
Iviewit Holdings, Inc.

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Formalities Officer
Tel. No. (089) 2399-2833

Annex:

REGISTERED LETTER

EPO Form 2502B 06.99 FORR Coded 7051051 08/03/05

Date Initials

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Einschreiben / Registered letter / Lettre recommandée

Iviewit Holdings Inc.
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US - Boynton Beach, FL 33437-3546

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Durchwahl/Direct dial/
Ligne directe:

5110
Zeichen/Reference/Référence

hb/LD
Datum/Date/Date

25. 11. 04

Our Ref: **Legal R 13-268/2004**
Application No: **00 944 619.6** **00 938 126.0** **00 955 352.0**
Applicant: **Iviewit Holdings, Inc.**
Your Ref.:: **Your email 28 October 2004**

COMMUNICATION CONCERNING SUSPENSION OF PROCEEDINGS UNDER RULE 13 EPC AND INTERRUPTION OF THE PROCEEDINGS UNDER RULE 90 EPC.

Your email of **28 October 2004** was forwarded to the Legal Division for the purpose of examining whether a suspension of proceedings pursuant to Rule 13 EPC or an interruption of proceedings in accordance with Rule 90 EPC may apply.

1. Responsibility

The Legal Division has sole responsibility for the interruption and resumption of proceedings (OJ EPO 1989, 177 point 1. 2.b). **Please therefore address all relevant correspondence solely to the Legal Division in Munich, quoting the reference Legal R 13-268/2004.** The Legal Division automatically adds information about the suspension, interruption and resumption of proceedings to the file(s) in question.

2. Suspension of proceedings under Rule 13 EPC

The suspension of proceedings, pursuant to Rule 13 EPC, secures the rights of a third party and allows him time to prove his entitlement to the patent before a national court. According to Rule 13 EPC, if a **third party** provides proof to the EPO that he has opened proceedings against the applicant for the purpose of seeking judgment that the third party is entitled to the grant of a European patent, the EPO shall stay the proceedings for grant.

Hauptsitz/Headquarters/Siège
Erhardtstraße 27
80331 München

2.1 Jurisdiction

Rule 13 EPC applies only if the proceedings are opened before a Court which has jurisdiction to decide claims, against the applicant, to the right to the grant of a European patent. The determination of such question prior to grant is governed by the Protocol on Recognition which is an integral part of the European Patent Convention (see decision of the Enlarged Board of Appeal G 3/92, OJ EPO 1994, 607).

When both parties have neither a domicile nor a place of business in a Contracting State, Article 6 of the Protocol on Recognition provides exclusive jurisdiction of the German courts to the extent that no other rules on jurisdiction apply. Although it would be possible for a court of a non-contracting state to hear the matter, the decision hold by this court would not automatically be recognised by all contracting states which are designated in the application.

2.2 Action initiated

Furthermore, entitlement proceedings have to be initiated under Rule 13 EPC. Proof must be provided that the necessary steps in commencing legal proceedings before a national court of a contracting state were taken in order to establish that the third party is entitled to the grant of the European patent and not the registered applicant.

2.3 Present case

In the present case, there is a dispute between the applicant and his former American patent attorneys. Claims of fraud, malpractice, conspiracy, breach of contract were filed before the USPTO and disciplinary actions against alleged offending attorneys seem to be pending. It seems that the litigation does not concern the property of the patent applications **Nos. 00 944 619.6, 00 938 126.0 and 00 955 352.0** moreover no third party has requested the suspension of proceedings.

Therefore proceedings before the EPO cannot be stayed on the basis of the initiated actions for the applications concerned as Rule 13 EPC foresees only entitlement actions initiated by a third party against the applicant.

3. Interruption of proceedings under Rule 90(1) EPC

In order to save applications from suffering loss of rights the European Patent Convention allows interruption of proceedings under certain specific conditions due to medical and / or financial hardship of the applicant or proprietor (Rule 90(1)(a) and (b)) and / or the professional representative (Rule 90(1)(c)).

3.1 Legal Incapacity (Rule 90(1)(a) EPC)

Proceedings before the EPO shall be interrupted in the event of the death or legal incapacity of the applicant for a European Patent or the person authorised by national law to act on his behalf (Rule 90(1)(a) EPC).

Legal incapacity means, that the applicant for a European patent or his representative, is not in the position to take action before the EPO for health reasons, such as for instance mental illness, mental deficiency, heavy physical illness or disability. This incapacity has to be established by means of production of an extensive and reliable medical opinion. Copies of national regulations concerning the interpretation of "incapacity" in the individual state concerned have to be filed too.

In the present case no request for interruption of the proceedings under Rule 90(1)(a) was filed, nor any evidence provided. It seems that the initiated actions taken before the USPTO and the circuit court of Florida do not concern incapacity of the applicant as defined in Rule 90(1)(a) EPC.

3.2 Action taken against the property (Rule 90(1)(b)(c) EPC).

Furthermore, proceedings before the EPO shall be interrupted in the event of the applicant for or proprietor of a European patent or his representative, as a result of some action taken against his property, being prevented from continuing the proceedings before the EPO (Rule 90(1)(b)(c) EPC). However it has to be established that the applicant for or proprietor of a European patent or his representative was prevented by **legal reasons** from continuing the proceedings before the EPO. The legal proceedings initiated against the applicant for or proprietor of a European patent or his representative must be in relation to bankruptcy proceedings or similar, the decisive criterion for interruption is whether the action against the property is such as to make it legally impossible to continue the proceedings (J 26/95, OJ 1999, 668). Financial difficulties are not a ground for interruption of proceedings under Rule 90(1)(b) or (c) EPC.

In the present case, it seems that no action has been taken against the applicant's property in the sense of Rule 90(1)(b) or (c) EPC.

4. Status of the applications

As a service from the EPO, please be informed that for each application concerned the registered address is to be checked. Should the address be amended a request should be filed accordingly by a duly appointed professional representative.

3.1 Patent application 00 944 619.6

Registered address: One Boca Place, 2255 Glades Road, Suite 337, US - West, Boca Raton, FL 33431.

A professional representative has to be appointed pursuant to Article 133(2) EPC.

Payment of the 4th year renewal fee was due on 30 June 2004. This payment can still validly be made within six months from the said date provided an additional fee is paid at the same time (Article 86(2) EPC). The six-month period ends on 31 December 2004 and will be extended until **3 January 2005** according to Rule 85(1) EPC.

3.2 Patent application 00 955 352.0

Registered address: 10158 Stonehenge Circle Suite 801, US - Boynton Beach, FL 33437-3546

A professional representative has to be appointed pursuant to Article 133(2) EPC.

Payment of the 5th year renewal fee was due on 31 August 2004. This payment can still validly be made within six months from the said date provided an additional fee is paid at the same time (Article 86(2) EPC). The six-month period ends on **28 February 2005**.

3.3 Patent application 00 938 126.0

Registered address: 505 North Brand Boulevard, Suite 1420, US - Glendale, CA 91203

A professional representative has to be appointed pursuant to Article 133(2) EPC.

Payment of the 5th year renewal fee was due on 30 June 2004. This payment can still validly be made within six months from the said date provided an additional fee is paid at the same time (Article 86(2) EPC). The six-month period ends on 31 December 2004 and will be extended until **3 January 2005** according to Rule 85(1) EPC.

4. Representation

Article 133(2) EPC stipulates that natural or legal persons not having either a contracting state residence or their principal place of business within the territory of one of the contacting states must be represented by a professional representative and act through him in all proceedings established by the European Patent Convention (EPC), other than in filling the European patent application. Any submissions by a non-European applicant, apart from when filling the European application, directly to the EPO cannot be taken into account.

The authorisation of the previous representative has been terminated as a result of relinquishment of representation by the professional representative.

You are hereby invited to appoint a professional representative within three months of notification of this communication. If this invitation is not replied to in due time, the European patent applications may be deemed to be withdrawn.

Lise Dybdahl
Director
Legal Division

Coryse Bourger/EPO
15-10-2004 14:14

To <iviewit@adelphia.net>
cc Annie Decroix/EPO@EPO, Dominique Furst-Fontaine/EPO@EPO
bcc
Subject RE: Attention: Mr. Eliot I. Bernstein

Dear Mr Bernstein,

Re:

Mr. Molyneaux, your previous representative advised the EPO with a fax received on 9.12.03 and confirmed on 15.12.03 that he withdrew
his representation.

On 13.01.04 the formalities officer of the EPO sent a communication to:
Iviewit Holdings, Inc.
One Boca Place
2255 Glades Road
Suite 337 West
Boca Raton, FL 33431.

This communication was returned to the European Patent Office with a note from the postal authorities attached, reading
"not deliverable -left no address". it is only from your e-mail of 22.09.04 that the EPO learned your new address to be
10158 Stonehenge Circle
Suite 801
Boynton Beach, FL 33437-3546.

The formalities officer of the EPO should re-issue EPO form 2502B and enclose the letter of withdrawal from your previous representative.

As soon as you have appointed a new representative, proceedings before the EPO will continue.

With respect to your request of suspension of proceedings under Rule 13 EPC, I can only repeat the content of my previous email i.e.
that the requirements of Rule 13 were not fulfilled on the date of filing of the request. An official communication regarding suspension under Rule 13 can
only be issued by the Legal division upon appointment of a new representative.

Kind regards/Mit freundlichen Grüssen/Salutations

Cory Bourger
Directorate 5.2.4 - DG5
European Patent Office

Tel.: (+49) (0)89 2399 5117
Fax: (+49) (0)89 2399 5148
email :cbourger@epo.org
"Eliot I. Bernstein" <iviewit@adelphia.net>

"Eliot I. Bernstein"
<iviewit@adelphia.net>
12-10-2004 19:13
Please respond to
<iviewit@adelphia.net>

To "'Coryse Bourger'" <cbourger@epo.org>
cc "'Dominique Furst-Fontaine'" <dfurstfontaine@epo.org>, "'David White'" <dwhite@epo.org>, "P. Stephen Lamont (E-mail)" <pstephen.lamont@verizon.net>, "Caroline Prochotska Rogers Esquire (E-mail 2)" <caroline@cprogers.com>, "Marc R. Garber (E-mail)"

<iviewit@adelphia.net>

cc (E-mail)" <pstephen.lamont@verizon.net>, "Caroline Prochotska Rogers Esquire (E-mail 2)" <caroline@cprogers.com>, "Marc R. Garber (E-mail)" <marc.garber@flastergreenberg.com>, "Marc R. Garber (E-mail 2)" <marc.garber@comcast.net>

Subject RE: Attention: Mr. Eliot I. Bernstein

Sir,

Prior to resigning as counsel for these cases Mr. Martyn W. Molyneaux filed for the cases to be suspended based upon charges of fraud upon the European Patent Office. We are wondering what happened to those claims filed by a licensed attorney in your system. Also, any withdrawal as counsel was based on what explanation, we would like a full copy of such withdrawal of counsel that was submitted. Since the matters were brought to the attention of the EPO while we were represented is it typical that it was ignored for this many months and that we have received no correspondence regarding the filed claim of fraud and request for suspension that was filed by Molyneaux.

Thank you,

Eliot I Bernstein

Founder, President & Inventor

561.364.4240

iviewit@adelphia.net

Iviewit Holdings, Inc.

10158 Stonehenge Circle

Coryse Bourger/EPO
12-10-2004 14:47

To iviewit@adelphia.net
cc Dominique Furst-Fontaine/EPO@EPO, David White/EPO@EPO
bcc
Subject Attention: Mr. Eliot I. Bernstein

Your e-mail of 23 September 2004 refers.

European patent applications: EP 00 944 619.6
EP 00 938 126.0
EP 00 955 352.0

Please be informed as follows:

1.The authorisation of your previous representative has been terminated as a result of relinquishment of representation by the professional representative.

2. As a result the requirements of Article 133(2) EPC are no longer met.

3. According to Article 133(2) EPC natural or legal persons not having either a residence or their principal place of business within the territory of one of the Contracting states to the European Patent Convention must be represented by a professional representative and act through him in all proceedings established by the Convention.

3. Until this deficiency is remedied, it is not possible for the Legal Division of the EPO to suspend or interrupt proceedings in accordance with Rule 13 or 90 EPC.

Moreover, from the documents on file it seems that the conditions of either Rule 13 or 90 of the Europen Patent Convention are not fulfilled.

Kind regards/Mit freundlichen Grüssen/Salutations

Cory Bourger
Directorate 5.2.4 - DG5
European Patent Office

Tel.: (+49) (0)89 2399 5117
Fax: (+49) (0)89 2399 5148
email :cbourger@epo.org

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TX 523 656 epmu d
FAX +49 89 2399-4465

Europäisches Patentamt | European Patent Office | Office européen des brevets

Generaldirektion 2 | Directorate General 2 | Direction Générale 2

COPY

Molyneaux, Martyn William
Harrison Goddard Foote
40-43 Chancery Lane
London WC2A 1JA
GRANDE BRETAGNE

Datum/Date
4.10.04

Zeichen/Ref./Réf.	Anmeldung Nr./Application No./Demande n°./Patent Nr./Patent No./Brevet n°.
MWM/P1739	00944619.6-1247 1188318

Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire
Iviewit Holdings, Inc.

Communication of amended entries

It is confirmed that, according ~~to~~ yours the request ~~dated~~ over the phone of 29.9.04.

1. [ ] the name [ ] of the (co-)applicant/patentee,

   [ ] the address [ ] of the opponent .....

   ..... ,

   as from ....., has/have been amended as follows:

   .....

   .....

   .....

   .....

2. [ ] the appointment of a representative
   [ ] the authorisation
   [X] the withdrawal from representation

   [ ] .....

   has/have been registered ~~as from~~ .....

../2

COPY

Notice:

Opponents having issued a general authorisation are requested to inform the Legal Department 5.1.1 at the EPO's Munich address about their change of name.
In case of different pending opposition procedures, opponents are requested to provide the EPO with an appropriate list of applications.

Formalities Officer
Tel. No.: (089) 2399-2833

Enclosure(s):

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D-80298 München
+49 89 2399-0
TX 523 656 epmu d
FAX +49 89 2399-4465

Europäisches Patentamt | European Patent Office | Office européen des brevets

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COPY

Molyneaux, Martyn William
Harrison Goddard Foote
40-43 Chancery Lane
London WC2A 1JA
GRANDE BRETAGNE

Datum/Date
27/09/04

Zeichen/Ref./Réf.	Anmeldung Nr./Application No./Demande n°/Patent Nr /Patent No./Brevet n°.
MWM / 1739	00944619.6-1247/1188318

Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire
Iviewit Holdings, Inc.

Communication of amended entries concerning the representative
(Rule 92 (1) (h) EPC)

As requested, for the above-mentioned European patent application /European patent the entries concerning the representative have been amended as follows:

Molyneaux, Martyn William, et al
Harrison Goddard Foote 40-43 Chancery Lane
London WC2A 1JA/GB

The amendment will be recorded in the Register of European Patents and published in the European Patent Bulletin (I.12/II.12).

Formalities Officer
Tel.No.: (089)2399 2833

Europäisches Patentamt • European Patent Office • Office européen des brevets

www.hgfip.com

harrison goddard foote®

patent and trade mark attorneys

(Incorporating Brewer & Son)

Please Note our New Details:
40 - 43 Chancery Lane
LONDON
WC2A 1JA, UK

telephone
+44(0) 207 440 8900
facsimile
+44(0) 207 440 8901
email
cwant@hgfip.com

9 September 2004

European Patent Office
Erhardtstrasse 27
D-80298 MUNICH
Germany

Our refs: MWM/P/1739.EP
MWM/P/1740.EP

Dear Sirs

European Patent Application No 00944619.6
PROVIDING ENHANCED VIDEO FILE
European Patent Application No 00938126.0
STREAMING ENHANCED VIDEO FILE
Iviewit Holdings, Inc.

On 9th December 2004 Martyn Molyneaux, then located at Wildman Harrold Allen & Dixon LLP, London withdrew representation in respect of the two subject applications, which relinquishment was notified to the Applicant by the EPO on 13th January 2004. On 18th December 2003 Martyn Molyneaux and the undersigned wrote a joint letter to the EPO informing the Office of the change of address of the representatives to the above address and including a schedule of affected cases. We apologise that inadvertently the two cases the subject of this letter were included in that schedule and consequentially we note that Martyn Molyneaux et al, at the above address, have been re-entered as the professional representatives in respect of the two subject applications.

Please note that Martyn Molyneaux et al at Harrison Goddard Foote do NOT act as professional representatives in respect of European Patent applications **00944619.6 and 00938126.0 in the name of Iviewit Holdings, Inc.** Please correct the European Patent Register accordingly.

Please acknowledge receipt of this letter by returning a copy of the enclosed Form 1037.

Yours faithfully

Clifford J. Want
European Patent Attorney

P.B.5818 - Patentlaan 2
2280 HV Rijswijk (ZH)
(070) 3 40 20 40
FAX (070) 3 40 30 16

Europäisches Patentamt	European Patent Office	Office européen des brevets
Generaldirektion 1	Directorate General 1	Direction générale 1

Molyneaux, Martyn William
Harrison Goddard Foote
40-43 Chancery Lane
London WC2A 1JA
GRANDE BRETAGNE

epoline® Customer Services
Tel.: +31 (0)70 340 45 00

Date
04.08.04

Reference	Application No./Patent No.
	00944619.6 - 1247 PCT/US0015405
Applicant/Proprietor	
Iviewit Holdings, Inc.	

Notice drawing attention to Article 86(2) EPC, Art. 2 No. 5 of the rules relating to fees
- Payment of the renewal fee plus additional fee -

The renewal fee for the 05. year fell due on 30.06.04 unless this date falls within the period covered by an interruption of the proceedings in accordance with Rule 90(1) EPC.

The amount of the renewal fee on that date was **EUR 430,00** (see OJ EPO 2001, 374, 377, 378, and 543).

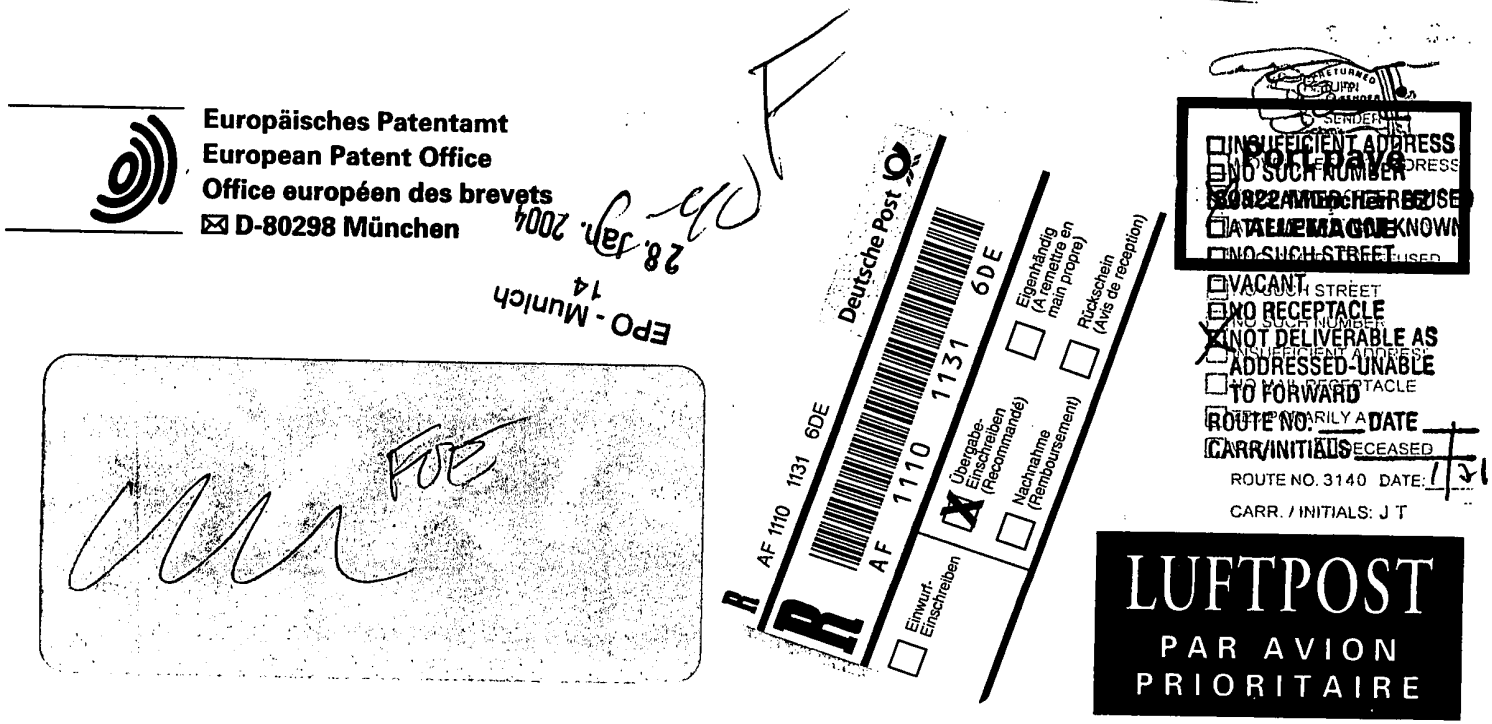
The renewal fee was not paid by the due date.
The renewal fee may still be validly paid **up to the last day of the sixth calender month** following the due date, provided that the additional fee (10% of the renewal fee) is paid at the same time.

Within the above period which cannot be extended the following fees are to be paid:

Renewal fee for the 05. year:	EUR	430,00
Additional fee:	EUR	43,00
TOTAL AMOUNT	EUR	473,00

If the renewal fee and the additional fee are not paid in due time, the European patent application shall be deemed to be withdrawn (Art.86(3) EPC).

Note to users of the automatic debiting procedure:
The normal time limit for payment of the above renewal fee had already expired when the automatic debit order was received. The renewal fee and the surcharge will be debited automatically on the last day of the period of grace (Supplement to OJ EPO 2/1999; OJ EPO 2000, 62).


Europäisches Patentamt
European Patent Office
Office européen des brevets
D-80298 München
28. Jan. 2004
EPO - Munich
14
FOE
Deutsche Post
AF 1110 1131 6DE
AF 1110 1131 6DE
Einwurf-Einschreiben
Übergabe-Einschreiben (Recommandé)
Eigenhändig (A remettre en main propre)
Nachnahme (Remboursement)
Rückschein (Avis de réception)
INSUFFICIENT ADDRESS
NO SUCH NUMBER
NO SUCH STREET
VACANT
NO RECEPTACLE
NOT DELIVERABLE AS ADDRESSED-UNABLE TO FORWARD
ROUTE NO. DATE
CARR/INITIALS
ROUTE NO. 3140 DATE: 1/21
CARR. / INITIALS: J T
LUFTPOST
PAR AVION
PRIORITAIRE

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Europäisches Patentamt | European Patent Office | Office européen des brevets

Generaldirektion 2 | Directorate General 2 | Direction Générale 2

Iviewit Holdings, Inc.
One Boca Place,
2255 Glades Road,
Suite 337 West
Boca Ralton, FL 33431
ETATS-UNIS D'AMERIQUE

Datum/Date
13. 01. 04

Zeichen/Ref./Réf.	Anmeldung Nr./Application No./Demande n°./Patent Nr ./Patent No./Brevet n°.
P/1739.EP/MWM	00944619.6-1247

Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire
Iviewit Holdings, Inc.

Invitation to give notice of appointment of a professional representative

The authorisation of the previous representative has been terminated as a result of
[X] relinquishment of representation by the professional representative (see annex),
[ ] your withdrawal of the authorisation.

As a result the requirements of Article 133(2) EPC are no longer met.

According to Article 133(2) EPC natural or legal persons not having either a residence or their principal place of business within the territory of one of the Contracting States to the European Patent Convention must be represented by a professional representative (cf. Article 134 EPC) and act through him in all proceedings established by the Convention.

You are hereby requested to remedy the above deficiency (notice of appointment of a professional representative) within t h r e e months of notification of this communication.

If this invitation is not replied to in due time, the European patent application will be deemed to be withdrawn (Article 96(3) EPC).

Until the specified deficiency is remedied, you may not take any procedural steps in the opposition proceedings (Article 133(2) EPC).

Formalities Officer
Tel. No. (089) 2399-2458 M. E. Turza

Annex:

REGISTERED LETTER

EPO Form 2502B 06.99 FORR Coded 7051051 08/01/04

Date Initials

Wildman, Harrold, Allen & Dixon LLP
11th Floor, Tower 3,
Clements Inn
London
WC2A 2AZ
United Kingdom
TEL: +44 (20) 7831 0009
FAX: +44 (20) 7831 9005
www.wildmanharrold.com

Martyn W. Molyneaux
+44 (20) 7841-5220
Molyneaux@wildmanharrold.com

Wildman Harrold
Attorneys and Counselors

BY FACSIMILE

December 9, 2003

The European Patent Office,
Erhardstrasse 27,
D-80298 Munich,
GERMANY.

Dear Sirs,

Re: European Patent Appln. No. 00944619.6
IVIEWIT HOLDINGS, INC.
Our Ref: P/1739.EP/MWM

This is to advise that we withdraw our representation on the above numbered application.

Please acknowledge receipt by return of the attached copy letter.

Yours faithfully,
WILDMAN, HARROLD, ALLEN & DIXON LLP

MARTYN W. MOLYNEAUX

MWM/mmh

EPA/EPO/OEB
D-80298 München
+49 89 2399-0
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FAX +49 89 2399-4465

Europäisches Patentamt | European Patent Office | Office européen des brevets

Generaldirektion 2 | Directorate General 2 | Direction Générale 2

COPY

Molyneaux, Martyn William
Wildman, Harrold, Allen & Dixon
11th Floor, Tower 3,
Clements Inn,
London WC2A 2AZ
GRANDE BRETAGNE

Datum/Date
13.01.04

Zeichen/Ref./Réf.	Anmeldung Nr./Application No./Demande n°/Patent Nr /Patent No./Brevet n°.
P/1739.EP/MWM	00944619.6-1247 1188318

Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire
Iviewit Holdings, Inc.

Communication of amended entries

It is confirmed that, according to the request dated 9.12.03

1. [ ] the name [ ] of the (co-)applicant/patentee,

   [ ] the address [ ] of the opponent .....

   ..... ,

   as from ....., has/have been amended as follows:

   .....

   .....

   .....

   .....

2. [ ] the appointment of a representative
   [ ] the authorisation
   [X] the withdrawal from representation

   [ ] .....

   has/have been registered as from 9.12.03

../2

COPY

Notice:

Opponents having issued a general authorisation are requested to inform the Legal Department 5.1.1 at the EPO's Munich address about their change of name.
In case of different pending opposition procedures, opponents are requested to provide the EPO with an appropriate list of applications.

Formalities Officer
Tel. No.: (089) 2399- M. Torza

Enclosure(s):

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D-80298 München
+49 89 2399-0
TX 523 656 epmu d
FAX +49 89 2399-4465

Europäisches Patentamt | European Patent Office | Office européen des brevets

Generaldirektion 2 | Directorate General 2 | Direction Générale 2

COPY

Iviewit Holdings, Inc.
One Boca Place,
2255 Glades Road,
Suite 337 West
Boca Ralton, FL 33431
ETATS-UNIS D'AMERIQUE

Datum/Date
13. 01. 04

Zeichen/Ref./Réf.	Anmeldung Nr./Application No./Demande n°./Patent Nr./Patent No./Brevet n°.
P/1739.EP/MWM	00944619.6-1247

Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire
Iviewit Holdings, Inc.

Invitation to give notice of appointment of a professional representative

The authorisation of the previous representative has been terminated as a result of
[X] relinquishment of representation by the professional representative (see annex),
[ ] your withdrawal of the authorisation.

As a result the requirements of Article 133(2) EPC are no longer met.

According to Article 133(2) EPC natural or legal persons not having either a residence or their principal place of business within the territory of one of the Contracting States to the European Patent Convention must be represented by a professional representative (cf. Article 134 EPC) and act through him in all proceedings established by the Convention.

You are hereby requested to remedy the above deficiency (notice of appointment of a professional representative) within t h r e e months of notification of this communication.

If this invitation is not replied to in due time, the European patent application will be deemed to be withdrawn (Article 96(3) EPC).

Until the specified deficiency is remedied, you may not take any procedural steps in the opposition proceedings (Article 133(2) EPC).

Formalities Officer
Tel. No. (089) 2399- M. Torza

Annex:

REGISTERED LETTER

			Date	Initials

Ust

Wildman, Harrold, Allen & Dixon LLP
11th Floor, Tower 3,
Clements Inn
London
WC2A 2AZ
United Kingdom
Tel. (020) 7831 0009
Fax (020) 7831 9005
www.wildmanharrold.com

Wildman Harrold
Attorneys and Counselors

December 18, 2003

The European Patent Office
D-80298 Munich
GERMANY

Dear Sirs

RE: Change of Address of Representatives

In respect of the European Patent Applications and European Patents listed on the attached schedule, we request that the address of the representatives be amended on the respective files and on the Patent Register to:

Harrison Goddard Foote
40-43 Chancery Lane
London
WC2A 1JA
United Kingdom

Yours faithfully
WILDMAN HARROLD
ALLEN & DIXON LLP

MARTYN W MOLYNEAUX CLIFFORD J WANT

The professional representative's address for the following cases will change to Harrison Goddard Foote, 40-43 Chancery Lane, London, WC2A 1JB, UK effective 2 January 2004 for Martyn W Molyneaux and effective 2 February 2004 for Clifford J Want.
Please amend your records accordingly.

Appln no	Patent	Applicant	Representative	Our ref.
00300009.8		Tektronix, Inc.	Martyn W. Molyneaux	P/1418.EP/MWM
00300122.9		Tektronix, Inc.	Martyn W. Molyneaux	P/1011.EP/MWM
00301146.7		Tektronix, Inc.	Martyn W. Molyneaux	P/1010.EP/MWM
00301859.5	1037467	Tandberg Television ASA	Martyn W. Molyneaux	P/1516.EP/MWM
00303268.7		Tektronix, Inc.	Martyn W. Molyneaux	P/1009.EP/MWM
00303540.9		Tektronix, Inc.	Martyn W. Molyneaux	P/1496.EP/MWM
00303541.7		Tektronix, Inc.	Martyn W. Molyneaux	P/1495.EP/MWM
00303677.9		Tut Systems, Inc.	Martyn W. Molyneaux	P/1497.EP/MWM
00305046.5	1063595	Tut Systems, Inc.	Martyn W. Molyneaux	P/1478.EP/MWM
00307789.8		Tandberg Television ASA	Martyn W. Molyneaux	P/1515.EP/MWM
00309649.2		Tektronix, Inc.	Martyn W. Molyneaux	P/1499.EP/MWM
00310542.6		Tektronix, Inc.	Martyn W. Molyneaux	P/1500.EP/MWM
00310543.4		Tektronix, Inc.	Martyn W. Molyneaux	P/1501.EP/MWM
00311329.7		Tektronix, Inc.	Martyn W. Molyneaux	P/1421.EP/MWM
00904181.5		Catalina Marketing International,	Martyn W. Molyneaux	P/1848.EP/MWM
00904318.3	1141892	Intel Corporation	Martyn W. Molyneaux	P/1380.EP/MWM
00904402.5		Intel Corporation	Martyn W. Molyneaux	P/1383.EP/MWM
00905568.2		LIGHTLOGIC, INC	Martyn W. Molyneaux	P/1110.EP/MWM
00908724.8		Intel Corporation	Martyn W. Molyneaux	P/1480.EP/MWM
00911683.1		Catalina Marketing International,	Martyn W. Molyneaux	P/1749.EP/MWM
00912030.4		Intel Corporation	Martyn W. Molyneaux	P/1572.EP/MWM
00912127.8		Intel Corporation	Martyn W. Molyneaux	P/1492.EP/MWM
00913225.9		Intel Corporation	Martyn W. Molyneaux	P/1381.EP/MWM
00913320.8		Catalina Marketing International,	Martyn W. Molyneaux	P/1825.EP/MWM
00913322.4		Catalina Marketing International,	Martyn W. Molyneaux	P/1678.EP/MWM
00913865.2		Intel Corporation	Martyn W. Molyneaux	P/1589.EP/MWM
00914475.9		Catalina Marketing International,	Martyn W. Molyneaux	P/1918.EP/MWM
00914476.7		Catalina Marketing International,	Martyn W. Molyneaux	P/1868.EP/MWM
00914523.6		Intel Corporation	Martyn W. Molyneaux	P/1463.EP/MWM
00915691.0		LIGHTLOGIC, INC	Martyn W. Molyneaux	P/1112.EP/MWM
00915723.1		Catalina Marketing International,	Martyn W. Molyneaux	P/1924.EP/MWM
00915769.4		Catalina Marketing International,	Martyn W. Molyneaux	P/1961.EP/MWM
00915772.8		Catalina Marketing International,	Martyn W. Molyneaux	P/1895.EP/MWM
00916273.6		Intel Corporation	Martyn W. Molyneaux	P/1580.EP/MWM
00918232.0		Intel Corporation	Martyn W. Molyneaux	P/1608.EP/MWM
00921543.5		Intel Corporation	Martyn W. Molyneaux	P/1627.EP/MWM
00922233.2		Intel Corporation	Martyn W. Molyneaux	P/1616.EP/MWM
00923352.9		Intel Corporation	Martyn W. Molyneaux	P/1628.EP/MWM
00925990.4		Intel Corporation	Martyn W. Molyneaux	P/1626.EP/MWM
00926240.3		Intel Corporation	Martyn W. Molyneaux	P/1610.EP/MWM
00928125.4		Catalina Marketing International,	Martyn W. Molyneaux	P/2048.EP/MWM
00928740.0		Intel Corporation	Martyn W. Molyneaux	P/1642.EP/MWM
00928741.8		Intel Corporation	Martyn W. Molyneaux	P/1644.EP/MWM
00928744.2		Intel Corporation	Martyn W. Molyneaux	P/1646.EP/MWM
00928746.7		Intel Corporation	Martyn W. Molyneaux	P/1625.EP/MWM
00930090.6		Intel Corporation	Martyn W. Molyneaux	P/1588.EP/MWM
00930299.3		Intel Corporation	Martyn W. Molyneaux	P/1643.EP/MWM

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Appln no	Patent	Applicant	Representative	Our ref.
00930581.4		Intel Corporation	Martyn W. Molyneaux	P/1654.EP/MWM
00930704.2		Intel Corporation	Martyn W. Molyneaux	P/1653.EP/MWM
00930815.6		Intel Corporation	Martyn W. Molyneaux	P/1664.EP/MWM
00932809.7		Intel Corporation	Martyn W. Molyneaux	P/1696.EP/MWM
00936341.7		Intel Corporation	Martyn W. Molyneaux	P/1695.EP/MWM
00938126.0		Iviewit Holdings, Inc.	Martyn W. Molyneaux	P/1740.EP/MWM
00939821.5		Intel Corporation	Martyn W. Molyneaux	P/1668.EP/MWM
00939876.9		Dialogic Corporation	Martyn W. Molyneaux	P/1734.EP/MWM
00939916.3		Intel Corporation	Martyn W. Molyneaux	P/1676.EP/MWM
00941742.9		Intel Corporation	Martyn W. Molyneaux	P/1763.EP/MWM
00943178.4		Intel Corporation	Martyn W. Molyneaux	P/1780.EP/MWM
00943364.0		Intel Corporation	Martyn W. Molyneaux	P/1782.EP/MWM
00943433.3		Intel Corporation	Martyn W. Molyneaux	P/1677.EP/MWM
00943434.1		Intel Corporation	Martyn W. Molyneaux	P/1736.EP/MWM
00944619.6		Iviewit Holdings, Inc.	Martyn W. Molyneaux	P/1739.EP/MWM
00946779.6		Dialogic Corporation	Martyn W. Molyneaux	P/1733.EP/MWM
00946792.9		Catalina Marketing International,	Martyn W. Molyneaux	P/1966.EP/MWM
00946793.7		Catalina Marketing International,	Martyn W. Molyneaux	P/2103.EP/MWM
00948225.8	1201108	Xsil Technology Limited	CLIFFORD J. WANT	P/1963.EP/CJW
00952318.4		Catalina Marketing International,	Martyn W. Molyneaux	P/1965.EP/MWM
00952513.0		Intel Corporation	Martyn W. Molyneaux	P/1781.EP/MWM
00955352.0		Iviewit Holdings, Inc.	Martyn W. Molyneaux	P/1783.EP/MWM
00955748.9		Intel Corporation	Martyn W. Molyneaux	P/1820.EP/MWM
00957587.9		Intel Corporation	Martyn W. Molyneaux	P/1818.EP/MWM
00957591.1		Intel Corporation	Martyn W. Molyneaux	P/1838.EP/MWM
00957939.2		Intel Corporation	Martyn W. Molyneaux	P/1846.EP/MWM
00959429.2		Catalina Marketing International,	Martyn W. Molyneaux	P/2134.EP/MWM
00961342.3		Intel Corporation	Martyn W. Molyneaux	P/1819.EP/MWM
00964904.7		Catalina Marketing International,	Martyn W. Molyneaux	P/1869.EP/MWM
00966958.1		Intel Corporation	Martyn W. Molyneaux	P/1874.EP/MWM
00966977.1		Intel Corporation	Martyn W. Molyneaux	P/1861.EP/MWM
00967130.6		Intel Corporation	Martyn W. Molyneaux	P/1884.EP/MWM
00968155.2		Tsunami Photonics Limited	CLIFFORD J. WANT	P/1804.EP/CJW
00970828.0		Intel Corporation	Martyn W. Molyneaux	P/1925.EP/MWM
00970895.9		Intel Corporation	Martyn W. Molyneaux	P/1909.EP/MWM
00970896.7		Intel Corporation	Martyn W. Molyneaux	P/1910.EP/MWM
00973382.5		Catalina Marketing International,	Martyn W. Molyneaux	P/2185.EP/MWM
00973686.9		Intel Corporation	Martyn W. Molyneaux	P/1917.EP/MWM
00973879.0		Intel Corporation	Martyn W. Molyneaux	P/1934.EP/MWM
00973889.9		Intel Corporation	Martyn W. Molyneaux	P/1933.EP/MWM
00975190.0		Intel Corporation	Martyn W. Molyneaux	P/1858.EP/MWM
00978748.2		Catalina Marketing International,	Martyn W. Molyneaux	P/2193.EP/MWM
00978851.4		Intel Corporation	Martyn W. Molyneaux	P/1931.EP/MWM
00978853.0		Intel Corporation	Martyn W. Molyneaux	P/1972.EP/MWM
00980272.9		Catalina Marketing International,	Martyn W. Molyneaux	P/2133.EP/MWM
00980661.3		Catalina Marketing International,	Martyn W. Molyneaux	P/2132.EP/MWM
00980846.0		Catalina Marketing International,	Martyn W. Molyneaux	P/2147.EP/MWM

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Appln no	Patent	Applicant	Representative	Our ref
00980847.8		Catalina Marketing International,	Martyn W. Molyneaux	P/2225.EP/MWM
00982256.0		Catalina Marketing International,	Martyn W. Molyneaux	P/2131.EP/MWM
00982593.6		Intel Corporation	Martyn W. Molyneaux	P/1862.EP/MWM
00982616.5		Intel Corporation	Martyn W. Molyneaux	P/1866.EP/MWM
00984926.6		GIGA APS	Martyn W. Molyneaux	P/1968.EP/MWM
00986289.7		Supermarkets Online, Inc.	Martyn W. Molyneaux	P/2237.EP/MWM
00989652.3		Intel Corporation	Martyn W. Molyneaux	P/1903.EP/MWM
00989661.4		Intel Corporation	Martyn W. Molyneaux	P/1932.EP/MWM
00989667.1		Intel Corporation	Martyn W. Molyneaux	P/1886.EP/MWM
00989714.1		Intel Corporation	Martyn W. Molyneaux	P/1941.EP/MWM
00990187.7		Intel Corporation	Martyn W. Molyneaux	P/1969.EP/MWM
00992156.0		Intel Corporation	Martyn W. Molyneaux	P/1971.EP/MWM
00992157.8		Intel Corporation	Martyn W. Molyneaux	P/1970.EP/MWM
00992247.7		Intel Corporation	Martyn W. Molyneaux	P/1973.EP/MWM
00992769.0		Praful Doshi	CLIFFORD J. WANT	P/1863.EP/CJW
01270830.1		Intel Corporation	Martyn W. Molyneaux	P/2345.EP/MWM
01272454.8		Intel Corporation	Martyn W. Molyneaux	P/2352.EP/MWM
01272455.5		Intel Corporation	Martyn W. Molyneaux	P/2406.EP/MWM
01272461.3		Intel Corporation	Martyn W. Molyneaux	P/2389.EP/MWM
01272463.9		Intel Corporation	Martyn W. Molyneaux	P/2353.EP/MWM
01272472.0		Intel Corporation	Martyn W. Molyneaux	P/2354.EP/MWM
01273024.8		Intel Corporation	Martyn W. Molyneaux	P/2422.EP/MWM
01273025.5		Intel Corporation	Martyn W. Molyneaux	P/2423.EP/MWM
01273029.7		Intel Corporation	Martyn W. Molyneaux	P/2429.EP/MWM
01273031.3		Intel Corporation	Martyn W. Molyneaux	P/2430.EP/MWM
01274107.0		Intel Corporation	Martyn W. Molyneaux	P/2371.EP/MWM
01300839.6		Tektronix, Inc.	Martyn W. Molyneaux	P/1502.EP/MWM
01301751.2		Tektronix, Inc.	Martyn W. Molyneaux	P/1426.EP/MWM
01301929.4		Tektronix, Inc.	Martyn W. Molyneaux	P/1427.EP/MWM
01301932.8	1132720	Tektronix, Inc.	Martyn W. Molyneaux	P/1428.EP/MWM
01301964.1		Tektronix, Inc.	Martyn W. Molyneaux	P/1415.EP/MWM
01301968.2		Tut Systems, Inc.	Martyn W. Molyneaux	P/1460.EP/MWM
01301969.0		Tektronix, Inc.	Martyn W. Molyneaux	P/1413.EP/MWM
01302234.8		Tektronix, Inc.	Martyn W. Molyneaux	P/1564.EP/MWM
01302235.5		Tektronix, Inc.	Martyn W. Molyneaux	P/1565.EP/MWM
01304010.0		Tektronix, Inc.	Martyn W. Molyneaux	P/1503.EP/MWM
01304430.0		Braitrim Deutschland GmbH	CLIFFORD J. WANT	P/2297.EP/CJW
01305946.4		Tektronix, Inc.	Martyn W. Molyneaux	P/1003.EP/MWM
01305956.3		Tut Systems, Inc.	Martyn W. Molyneaux	P/1002.EP/MWM
01305957.1		Tektronix, Inc.	Martyn W. Molyneaux	P/1001.EP/MWM
01306291.4		Tektronix, Inc.	Martyn W. Molyneaux	P/1004.EP/MWM
01306348.2		Tektronix, Inc.	Martyn W. Molyneaux	P/1005.EP/MWM
01306680.8		Tektronix, Inc.	Martyn W. Molyneaux	P/1006.EP/MWM
01306946.3		Tektronix, Inc.	Martyn W. Molyneaux	P/1007.EP/MWM
01307517.1		Tektronix, Inc.	Martyn W. Molyneaux	P/1008.EP/MWM
01308791.1		Tektronix, Inc.	Martyn W. Molyneaux	P/1606.EP/MWM
01310572.1		Tandberg Television ASA	Martyn W. Molyneaux	P/1422.EP/MWM

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Appln no	Patent	Applicant	Representative	Our ref.
01903353.9		Intel Corporation	Martyn W. Molyneaux	P/1975.EP/MWM
01903354.7		Intel Corporation	Martyn W. Molyneaux	P/1974.EP/MWM
01906553.1		Catalina Marketing International,	Martyn W. Molyneaux	P/2293.EP/MWM
01907161.2		Anadys Pharmaceuticals, Inc.	CLIFFORD J. WANT	P/1977.EP/CJW
01908594.3		Catalina Marketing International,	Martyn W. Molyneaux	P/2284.EP/MWM
01909227.9		Intel Corporation	Martyn W. Molyneaux	P/1987.EP/MWM
01911197.0		Catalina Marketing International,	Martyn W. Molyneaux	P/2327.EP/MWM
01914728.9		Intel Corporation	Martyn W. Molyneaux	P/2072.EP/MWM
01915610.8		Catalina Marketing International,	Martyn W. Molyneaux	P/1543.EP/MWM
01916440.9		Intel Corporation	Martyn W. Molyneaux	P/2059.EP/MWM
01916628.9		Intel Corporation	Martyn W. Molyneaux	P/2073.EP/MWM
01918207.0		Intel Corporation	Martyn W. Molyneaux	P/2041.EP/MWM
01918404.3		Intel Corporation	Martyn W. Molyneaux	P/2060.EP/MWM
01918405.0		Intel Corporation	Martyn W. Molyneaux	P/2042.EP/MWM
01918633.7		Intel Corporation	Martyn W. Molyneaux	P/2074.EP/MWM
01920352.0		Active Motif	CLIFFORD J. WANT	P/2022.EP/CJW
01922404.7		Intel Corporation	Martyn W. Molyneaux	P/2070.EP/MWM
01922940.0		Intel Corporation	Martyn W. Molyneaux	P/2068.EP/MWM
01922941.8		Intel Corporation	Martyn W. Molyneaux	P/2075.EP/MWM
01923116.6		Intel Corporation	Martyn W. Molyneaux	P/2079.EP/MWM
01923292.5		Anadys Pharmaceuticals, Inc.	CLIFFORD J. WANT	P/1976.EP/CJW
01924523.2		Intel Corporation	Martyn W. Molyneaux	P/2066.EP/MWM
01926384.7		Catalina Marketing International,	Martyn W. Molyneaux	P/2366.EP/MWM
01926520.6		Intel Corporation	Martyn W. Molyneaux	P/2067.EP/MWM
01926865.5		Puracyp	CLIFFORD J. WANT	P/2056.EP/CJW
01930417.9		Intel Corporation	Martyn W. Molyneaux	P/2071.EP/MWM
01933071.1		Catalina Marketing International,	Martyn W. Molyneaux	P/2069.EP/MWM
01933074.5		Catalina Marketing International,	Martyn W. Molyneaux	P/2081.EP/MWM
01933134.7		Catalina Marketing International,	Martyn W. Molyneaux	P/2080.EP/MWM
01933135.4		Catalina Marketing International,	Martyn W. Molyneaux	P/2076.EP/MWM
01933200.6		Catalina Marketing International,	Martyn W. Molyneaux	P/2109.EP/MWM
01933204.8		Catalina Marketing International,	Martyn W. Molyneaux	P/2078.EP/MWM
01935169.1		Catalina Marketing International,	Martyn W. Molyneaux	P/2105.EP/MWM
01939587.0		Intel Corporation	Martyn W. Molyneaux	P/2154.EP/MWM
01939847.8		Intel Corporation	Martyn W. Molyneaux	P/2089.EP/MWM
01939877.5		Intel Corporation	Martyn W. Molyneaux	P/2121.EP/MWM
01941818.5		Intel Corporation	Martyn W. Molyneaux	P/2149.EP/MWM
01942135.3		Intel Corporation	Martyn W. Molyneaux	P/2102.EP/MWM
01942144.5		Intel Corporation	Martyn W. Molyneaux	P/2113.EP/MWM
01944231.8		Intel Corporation	Martyn W. Molyneaux	P/2152.EP/MWM
01944326.6		Intel Corporation	Martyn W. Molyneaux	P/2097.EP/MWM
01944402.5		Intel Corporation	Martyn W. Molyneaux	P/2148.EP/MWM
01944413.2		Intel Corporation	Martyn W. Molyneaux	P/2101.EP/MWM
01944510.5		Catalina Marketing International,	Martyn W. Molyneaux	P/2110.EP/MWM
01944542.8		Intel Corporation	Martyn W. Molyneaux	P/2122.EP/MWM
01944572.5		Intel Corporation	Martyn W. Molyneaux	P/2143.EP/MWM
01944573.3		Intel Corporation	Martyn W. Molyneaux	P/2153.EP/MWM

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01944574.1		Intel Corporation	Martyn W. Molyneaux	P/2156.EP/MWM
01946207.6		Intel Corporation	Martyn W. Molyneaux	P/2144.EP/MWM
01946437.9		Intel Corporation	Martyn W. Molyneaux	P/2151.EP/MWM
01946471.8		Intel Corporation	Martyn W. Molyneaux	P/2126.EP/MWM
01948309.8		Intel Corporation	Martyn W. Molyneaux	P/2096.EP/MWM
01948313.0		Intel Corporation	Martyn W. Molyneaux	P/2111.EP/MWM
01948405.4		Intel Corporation	Martyn W. Molyneaux	P/2155.EP/MWM
01948456.7		Intel Corporation	Martyn W. Molyneaux	P/2112.EP/MWM
01948600.0		Intel Corporation	Martyn W. Molyneaux	P/2107.EP/MWM
01948645.5		Intel Corporation	Martyn W. Molyneaux	P/2106.EP/MWM
01948666.1		Intel Corporation	Martyn W. Molyneaux	P/2165.EP/MWM
01954831.2		Intel Corporation	Martyn W. Molyneaux	P/2163.EP/MWM
01956104.2		Braddock, Walter David IV	Martyn W. Molyneaux	P/2174.EP/MWM
01957515.8		Intel Corporation	Martyn W. Molyneaux	P/2201.EP/MWM
01959275.7		Intel Corporation	Martyn W. Molyneaux	P/2200.EP/MWM
01959749.1		Intel Corporation	Martyn W. Molyneaux	P/2202.EP/MWM
01959951.3		Intel Corporation	Martyn W. Molyneaux	P/1997.EP/MWM
01962185.3		Intel Corporation	Martyn W. Molyneaux	P/2186.EP/MWM
01962212.5		Intel Corporation	Martyn W. Molyneaux	P/2209.EP/MWM
01963936.8		Braddock, Walter David IV	Martyn W. Molyneaux	P/2176.EP/MWM
01964189.3		Intel Corporation	Martyn W. Molyneaux	P/2208.EP/MWM
01965879.8		Intel Corporation	Martyn W. Molyneaux	P/2203.EP/MWM
01967960.4		Braddock, Walter David IV	Martyn W. Molyneaux	P/2175.EP/MWM
01968553.6		Intel Corporation	Martyn W. Molyneaux	P/2230.EP/MWM
01970637.3		Intel Corporation	Martyn W. Molyneaux	P/2228.EP/MWM
01971192.8		Intel Corporation	Martyn W. Molyneaux	P/2220.EP/MWM
01971304.9		Intel Corporation	Martyn W. Molyneaux	P/2244.EP/MWM
01973338.5		Intel Corporation	Martyn W. Molyneaux	P/2240.EP/MWM
01973579.4		Intel Corporation	Martyn W. Molyneaux	P/2259.EP/MWM
01973593.5		Intel Corporation	Martyn W. Molyneaux	P/2248.EP/MWM
01973596.8		Intel Corporation	Martyn W. Molyneaux	P/2242.EP/MWM
01973598.4		Intel Corporation	Martyn W. Molyneaux	P/2243.EP/MWM
01973599.2		Intel Corporation	Martyn W. Molyneaux	P/2256.EP/MWM
01973711.3		Intel Corporation	Martyn W. Molyneaux	P/2229.EP/MWM
01975185.8		Catalina Marketing International,	Martyn W. Molyneaux	P/2260.EP/MWM
01975186.6		Catalina Marketing International,	Martyn W. Molyneaux	P/2261.EP/MWM
01975434.0		Intel Corporation	Martyn W. Molyneaux	P/2245.EP/MWM
01975435.7		Intel Corporation	Martyn W. Molyneaux	P/2241.EP/MWM
01975497.7		Intel Corporation	Martyn W. Molyneaux	P/2258.EP/MWM
01975518.0		Intel Corporation	Martyn W. Molyneaux	P/2249.EP/MWM
01975521.4		Intel Corporation	Martyn W. Molyneaux	P/2257.EP/MWM
01975753.3		IOSPAN WIRELESS, INC	Martyn W. Molyneaux	P/2289.EP/MWM
01977196.3		Intel Corporation	Martyn W. Molyneaux	P/2247.EP/MWM
01978765.4		Johann Springer	Martyn W. Molyneaux	P/1599.EP/MWM
01978768.8		Xsil Technology Limited	CLIFFORD J. WANT	P/2003.EP/CJW
01978769.6		Xsil Technology Limited	CLIFFORD J. WANT	P/2006.EP2/CJW
01979271.2		Intel Corporation	Martyn W. Molyneaux	P/2238.EP/MWM

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01979481.7		Intel Corporation	Martyn W. Molyneaux	P/2275.EP/MWM
01979711.7		Intel Corporation	Martyn W. Molyneaux	P/2276.EP/MWM
01983213.8		Prismedia Networks, Inc	Martyn W. Molyneaux	P/2302.EP/MWM
01985959.4		Prismedia Networks, Inc	Martyn W. Molyneaux	P/2300.EP/MWM
01986210.1		Intel Corporation	Martyn W. Molyneaux	P/2311.EP/MWM
01986469.3		Intel Corporation	Martyn W. Molyneaux	P/2393.EP/MWM
01986481.8		Intel Corporation	Martyn W. Molyneaux	P/2361.EP/MWM
01986547.6		Intel Corporation	Martyn W. Molyneaux	P/2435.EP/MWM
01986554.2		Intel Corporation	Martyn W. Molyneaux	P/2434.EP/MWM
01987145.8		Intel Corporation	Martyn W. Molyneaux	P/2428.EP/MWM
01987460.1		Intel Corporation	Martyn W. Molyneaux	P/2436.EP/MWM
01988170.5		Intel Corporation	Martyn W. Molyneaux	P/2347.EP/MWM
01988907.0		Catalina Marketing International,	Martyn W. Molyneaux	P/2283.EP/MWM
01989004.5		Prismedia Networks, Inc	Martyn W. Molyneaux	P/2301.EP/MWM
01989267.8		Intel Corporation	Martyn W. Molyneaux	P/2437.EP/MWM
01989795.8		Intel Corporation	Martyn W. Molyneaux	P/2346.EP/MWM
01991519.8		Intel Corporation	Martyn W. Molyneaux	P/2320.EP/MWM
01991603.0		Intel Corporation	Martyn W. Molyneaux	P/2367.EP/MWM
01991996.8		Catalina Marketing International,	Martyn W. Molyneaux	P/2232.EP/MWM
01992133.7		Nokia Intelligent Edge Routers In	Martyn W. Molyneaux	P/2359.EP/MWM
01992402.6		Intel Corporation	Martyn W. Molyneaux	P/2427.EP/MWM
01993091.6		Intel Corporation	Martyn W. Molyneaux	P/2310.EP/MWM
01994387.7		Intel Corporation	Martyn W. Molyneaux	P/2344.EP/MWM
01995262.1		Catalina Marketing International,	Martyn W. Molyneaux	P/2335.EP/MWM
01995886.7		Intel Corporation	Martyn W. Molyneaux	P/2425.EP/MWM
01995996.4		Intel Corporation	Martyn W. Molyneaux	P/2370.EP/MWM
01996068.1		Intel Corporation	Martyn W. Molyneaux	P/2318.EP/MWM
01998010.1		Intel Corporation	Martyn W. Molyneaux	P/2392.EP/MWM
01998067.1		Chameleon Systems, Inc.	Martyn W. Molyneaux	P/2336.EP/MWM
01998106.7		Intel Corporation	Martyn W. Molyneaux	P/2391.EP/MWM
01998899.7		Intel Corporation	Martyn W. Molyneaux	P/2319.EP/MWM
02250180.3		Tektronix, Inc.	Martyn W. Molyneaux	P/1750.EP/MWM
02250633.1		Tektronix, Inc.	Martyn W. Molyneaux	P/1772.EP/MWM
02250881.6		Tektronix, Inc.	Martyn W. Molyneaux	P/1773.EP/MWM
02252037.3		Tektronix, Inc.	Martyn W. Molyneaux	P/1843.EP/MWM
02252390.6		Trilogy Broadcast (Holdings) Ltd	Martyn W. Molyneaux	P/1474.EP/MWM
02252429.2		Tektronix, Inc.	Martyn W. Molyneaux	P/1844.EP/MWM
02254993.5		Tektronix, Inc.	Martyn W. Molyneaux	P/1957.EP/MWM
02256384.5		Tektronix, Inc.	Martyn W. Molyneaux	P/2004.EP/MWM
02257962.7		Tektronix, Inc.	Martyn W. Molyneaux	P/2087.EP/MWM
02700852.3		G-intek Co., Ltd.	Martyn W. Molyneaux	P/2321.EP/MWM
02701927.2		Intel Corporation	Martyn W. Molyneaux	P/2441.EP/MWM
02703307.5		Intel Corporation	Martyn W. Molyneaux	P/2468.EP/MWM
02704454.4		Intel Corporation	Martyn W. Molyneaux	P/2492.EP/MWM
02704966.7		Tandberg Television ASA	Martyn W. Molyneaux	P/1423.EP/MWM
02705811.4		Catalina Marketing International,	Martyn W. Molyneaux	P/2307.EP/MWM
02706474.0		Intel Corporation	Martyn W. Molyneaux	P/2479.EP/MWM

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Appln no	Patent	Applicant	Representative	Our ref
02707931.8		Intel Corporation	Martyn W. Molyneaux	P/2497.EP/MWM
02708490.4		Tandberg Television ASA	Martyn W. Molyneaux	P/1425.EP/MWM
02708601.6		Xsil Technology Limited	CLIFFORD J. WANT	P/2008.EP2/CJW
02709611.4		Intel Corporation	Martyn W. Molyneaux	P/2461.EP/MWM
02709618.9		Catalina Marketing International,	Martyn W. Molyneaux	P/2477.EP/MWM
02713638.1		Intel Corporation	Martyn W. Molyneaux	P/2498.EP/MWM
02717343.4		Catalina Marketing International,	Martyn W. Molyneaux	P/2306.EP/MWM
02717602.3		Intel Corporation	Martyn W. Molyneaux	P/2511.EP/MWM
02717699.9		Intel Corporation	Martyn W. Molyneaux	P/2493.EP/MWM
02718956.2		Intel Corporation	Martyn W. Molyneaux	P/2480.EP/MWM
02719405.9		Intel Corporation	Martyn W. Molyneaux	P/2508.EP/MWM
02719406.7		Intel Corporation	Martyn W. Molyneaux	P/2509.EP/MWM
02720159.9		Patrick Kerr	CLIFFORD J. WANT	P/1832.EP/CJW
02720229.0		Tandberg Television ASA	Martyn W. Molyneaux	P/1429.EP/MWM
02721221.6		Intel Corporation	Martyn W. Molyneaux	P/2490.EP/MWM
02721303.2		Intel Corporation	Martyn W. Molyneaux	P/2503.EP/MWM
02721304.0		Intel Corporation	Martyn W. Molyneaux	P/2502.EP/MWM
02721543.3		Intel Corporation	Martyn W. Molyneaux	P/2499.EP/MWM
02725358.2		Catalina Marketing International,	Martyn W. Molyneaux	P/2496.EP/MWM
02725662.7		Intel Corporation	Martyn W. Molyneaux	P/2529.EP/MWM
02729120.2		Intel Corporation	Martyn W. Molyneaux	P/2530.EP/MWM
02729197.0		Catalina Marketing International,	Martyn W. Molyneaux	P/2559.EP/MWM
02731090.3		TRANSPARENT NETWORKS, INC	Martyn W. Molyneaux	P/2487.EP/MWM
02734789.7		Intel Corporation	Martyn W. Molyneaux	P/2528.EP/MWM
02757131.4		Catalina Marketing International,	Martyn W. Molyneaux	P/2129.EP/MWM
02757801.2		Intel Corporation	Martyn W. Molyneaux	P/2506.EP/MWM
02757802.0		Intel Corporation	Martyn W. Molyneaux	P/2507.EP/MWM
02775836.6		Chameleon Systems, Inc.	Martyn W. Molyneaux	P/2342.EP/MWM
03000814.8		Intel Corporation	Martyn W. Molyneaux	P/1146.EPD/MWM
03011042.3		Intel Corporation	Martyn W. Molyneaux	P/1318.EPD/MWM
03013360.7		Intel Corporation	Martyn W. Molyneaux	P/1115.EPD/MWM
03250188.4		Tektronix, Inc.	Martyn W. Molyneaux	P/2099.EP/MWM
03250687.5		Tektronix, Inc.	Martyn W. Molyneaux	P/2166.EP/MWM
03252223.7		Tektronix, Inc.	Martyn W. Molyneaux	P/2271.EP/MWM
03252224.5		Tektronix, Inc.	Martyn W. Molyneaux	P/2270.EP/MWM
03252637.8		Waterson Corp.	Martyn W. Molyneaux	P/2299.EP/MWM
03252815.0		Kintech Technology Co., Ltd	Martyn W. Molyneaux	P/2309.EP/MWM
03253114.7		Tektronix, Inc.	Martyn W. Molyneaux	P/2324.EP/MWM
03254471.0		Tektronix, Inc.	Martyn W. Molyneaux	P/2415.EP/MWM
03254657.4		Tektronix, Inc.	Martyn W. Molyneaux	P/2416.EP/MWM
03255116.0		Tektronix, Inc.	Martyn W. Molyneaux	P/2456.EP/MWM
03255622.7		Tektronix, Inc.	Martyn W. Molyneaux	P/2482.EP/MWM
03255697.9		Tektronix International Sales Gmb	Martyn W. Molyneaux	P/2026.EP/MWM
03256155.7		Intel Corporation	Martyn W. Molyneaux	P/2485.EP/MWM
03256156.5		Intel Corporation	Martyn W. Molyneaux	P/2486.EP/MWM
03257152.3		Tektronix, Inc.	Martyn W. Molyneaux	P/2541.EP/MWM
95906202.7		Catalina Marketing International,	Martyn W. Molyneaux	P/1761.EP/MWM

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Appln no	Patent	Applicant	Representative	Our ref
97305408.3		Tektronix, Inc.	Martyn W. Molyneaux	P/1511.EP/MWM
97904264.5		Intel Corporation	Martyn W. Molyneaux	P/1117.EP/MWM
97904266.0		Intel Corporation	Martyn W. Molyneaux	P/1118.EP/MWM
97915072.9		Intel Corporation	Martyn W. Molyneaux	P/1126.EP/MWM
97915881.3		Intel Corporation	Martyn W. Molyneaux	P/1127.EP/MWM
97915900.1	0890260	Intel Corporation	Martyn W. Molyneaux	P/1123.EP/MWM
97915945.6	0954778	Intel Corporation	Martyn W. Molyneaux	P/1124.EP/MWM
97916777.2		Intel Corporation	Martyn W. Molyneaux	P/1115.EP/MWM
97928811.5		Intel Corporation	Martyn W. Molyneaux	P/1130.EP/MWM
97930056.3	0972251	Intel Corporation	Martyn W. Molyneaux	P/1140.EP/MWM
97931181.8		Intel Corporation	Martyn W. Molyneaux	P/1132.EP/MWM
97932317.7		Intel Corporation	Martyn W. Molyneaux	P/1142.EP/MWM
97933372.1	0958538	Intel Corporation	Martyn W. Molyneaux	P/1150.EP/MWM
97933375.4		Intel Corporation	Martyn W. Molyneaux	P/1145.EP/MWM
97933507.2		Intel Corporation	Martyn W. Molyneaux	P/1154.EP/MWM
97936473.4		Intel Corporation	Martyn W. Molyneaux	P/1171.EP/MWM
97937177.0		Intel Corporation	Martyn W. Molyneaux	P/1206.EP/MWM
97937329.7		Intel Corporation	Martyn W. Molyneaux	P/1165.EP/MWM
97940827.5	1019821	Intel Corporation	Martyn W. Molyneaux	P/1147.EP/MWM
97942628.5	0931289	Intel Corporation	Martyn W. Molyneaux	P/1148.EP/MWM
97944556.6		Intel Corporation	Martyn W. Molyneaux	P/1081.EP/MWM
97945363.6		Intel Corporation	Martyn W. Molyneaux	P/1172.EP/MWM
97946823.8		Tektronix Japan, Ltd	Martyn W. Molyneaux	P/2279.EP/MWM
97948426.8		Intel Corporation	Martyn W. Molyneaux	P/1177.EP/MWM
97949528.0		Intel Corporation	Martyn W. Molyneaux	P/1176.EP/MWM
97949605.6		Intel Corporation	Martyn W. Molyneaux	P/1053.EP/MWM
97950723.3		Intel Corporation	Martyn W. Molyneaux	P/1179.EP/MWM
97951664.8		Intel Corporation	Martyn W. Molyneaux	P/1178.EP/MWM
97952315.6		Intel Corporation	Martyn W. Molyneaux	P/1230.EP/MWM
97952460.0		Intel Corporation	Martyn W. Molyneaux	P/1180.EP/MWM
97952514.4	0966722	Intel Corporation	Martyn W. Molyneaux	P/1056.EP/MWM
97952516.9	0947097	Intel Corporation	Martyn W. Molyneaux	P/1181.EP/MWM
97953136.5		Intel Corporation	Martyn W. Molyneaux	P/1058.EP/MWM
97953276.9		Intel Corporation	Martyn W. Molyneaux	P/1055.EP/MWM
97954063.0		Intel Corporation	Martyn W. Molyneaux	P/1061.EP/MWM
97954248.7		Intel Corporation	Martyn W. Molyneaux	P/1051.EP/MWM
98302630.3	0870454	Braitrim (UK) Ltd	CLIFFORD J. WANT	P/2323.EP/CJW
98304221.9	0882993	Tempo Research Corporation	Martyn W. Molyneaux	P/1525.EP/MWM
98304517.0		Tektronix, Inc.	Martyn W. Molyneaux	P/1416.EP/MWM
98307483.2		Tektronix, Inc.	Martyn W. Molyneaux	P/1529.EP/MWM
98307488.1	0909028	Tektronix, Inc.	Martyn W. Molyneaux	P/1519.EP/MWM
98308441.9	0911638	Tektronix, Inc.	Martyn W. Molyneaux	P/1406.EP/MWM
98901096.2		Tektronix Japan, Ltd	Martyn W. Molyneaux	P/2280.EP/MWM
98901213.3	0970464	Intel Corporation	Martyn W. Molyneaux	P/1109.EP/MWM
98901757.9		Intel Corporation	Martyn W. Molyneaux	P/1044.EP/MWM
98903784.1		Intel Corporation	Martyn W. Molyneaux	P/1190.EP/MWM
98906115.5		Intel Corporation	Martyn W. Molyneaux	P/1113.EP/MWM

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Appln no	Patent	Applicant	Representative	Our ref
98909013.9	0965121	Intel Corporation	Martyn W. Molyneaux	P/1107.EP/MWM
98911767.6		Intel Corporation	Martyn W. Molyneaux	P/1187.EP/MWM
98913144.6		Intel Corporation	Martyn W. Molyneaux	P/1188.EP/MWM
98914261.7		Intel Corporation	Martyn W. Molyneaux	P/1189.EP/MWM
98914296.3		Intel Corporation	Martyn W. Molyneaux	P/1111.EP/MWM
98914552.9		Intel Corporation	Martyn W. Molyneaux	P/1191.EP/MWM
98918181.3		Intel Corporation	Martyn W. Molyneaux	P/1289.EP/MWM
98919783.5	0976036	Intel Corporation	Martyn W. Molyneaux	P/1192.EP/MWM
98925219.2		Intel Corporation	Martyn W. Molyneaux	P/1197.EP/MWM
98930284.9		Intel Corporation	Martyn W. Molyneaux	P/1202.EP/MWM
98932898.4		Intel Corporation	Martyn W. Molyneaux	P/1198.EP/MWM
98933209.3		Intel Corporation	Martyn W. Molyneaux	P/1082.EP/MWM
98934188.8		Intel Corporation	Martyn W. Molyneaux	P/1219.EP/MWM
98934260.5		Intel Corporation	Martyn W. Molyneaux	P/1203.EP/MWM
98934508.7		Intel Corporation	Martyn W. Molyneaux	P/1077.EP/MWM
98934611.9		Intel Corporation	Martyn W. Molyneaux	P/1064.EP/MWM
98934643.2		Intel Corporation	Martyn W. Molyneaux	P/1213.EP/MWM
98934644.0		Intel Corporation	Martyn W. Molyneaux	P/1211.EP/MWM
98935699.3		Intel Corporation	Martyn W. Molyneaux	P/1216.EP/MWM
98935769.4		Intel Corporation	Martyn W. Molyneaux	P/1204.EP/MWM
98936540.8	1025703	Tandberg Television ASA	Martyn W. Molyneaux	P/1509.EP/MWM
98936809.7		Intel Corporation	Martyn W. Molyneaux	P/1084.EP/MWM
98937166.1	1010062	Intel Corporation	Martyn W. Molyneaux	P/1205.EP/MWM
98937959.9		Intel Corporation	Martyn W. Molyneaux	P/1208.EP/MWM
98937980.5		Intel Corporation	Martyn W. Molyneaux	P/1207.EP/MWM
98941014.7		Catalina Marketing International,	Martyn W. Molyneaux	P/1419.EP/MWM
98942208.4		Intel Corporation	Martyn W. Molyneaux	P/1098.EP/MWM
98943290.1		Catalina Marketing International,	Martyn W. Molyneaux	P/1420.EP/MWM
98943307.3		Intel Corporation	Martyn W. Molyneaux	P/1100.EP/MWM
98943411.3		Intel Corporation	Martyn W. Molyneaux	P/1221.EP/MWM
98946111.6		Intel Corporation	Martyn W. Molyneaux	P/1218.EP/MWM
98946118.1		Intel Corporation	Martyn W. Molyneaux	P/1105.EP/MWM
98947109.9		Intel Corporation	Martyn W. Molyneaux	P/1217.EP/MWM
98953560.4		Intel Corporation	Martyn W. Molyneaux	P/1101.EP/MWM
98953567.9		Intel Corporation	Martyn W. Molyneaux	P/1102.EP/MWM
98955143.7		Intel Corporation	Martyn W. Molyneaux	P/1244.EP/MWM
98956607.0		Intel Corporation	Martyn W. Molyneaux	P/1231.EP/MWM
98956672.4		Intel Corporation	Martyn W. Molyneaux	P/1245.EP/MWM
98956688.0	1034664	Intel Corporation	Martyn W. Molyneaux	P/1222.EP/MWM
98957522.0		Intel Corporation	Martyn W. Molyneaux	P/1241.EP/MWM
98957991.7		Intel Corporation	Martyn W. Molyneaux	P/1227.EP/MWM
98957992.5		Intel Corporation	Martyn W. Molyneaux	P/1232.EP/MWM
98957993.3		Intel Corporation	Martyn W. Molyneaux	P/1228.EP/MWM
98958504.7		Intel Corporation	Martyn W. Molyneaux	P/1226.EP/MWM
98960606.6		Intel Corporation	Martyn W. Molyneaux	P/1248.EP/MWM
98961863.2		Intel Corporation	Martyn W. Molyneaux	P/1259.EP/MWM
98962023.2	1044413	Intel Corporation	Martyn W. Molyneaux	P/1233.EP/MWM

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98962834.2		Intel Corporation	Martyn W. Molyneaux	P/1223.EP/MWM
98963290.6		Intel Corporation	Martyn W. Molyneaux	P/1257.EP/MWM
98963873.9		Intel Corporation	Martyn W. Molyneaux	P/1239.EP/MWM
98963874.7		Intel Corporation	Martyn W. Molyneaux	P/1240.EP/MWM
98963902.6		Intel Corporation	Martyn W. Molyneaux	P/1246.EP/MWM
98963903.4		Intel Corporation	Martyn W. Molyneaux	P/1238.EP/MWM
98963959.6		Intel Corporation	Martyn W. Molyneaux	P/1247.EP/MWM
98964110.5	1038405	Intel Corporation	Martyn W. Molyneaux	P/1242.EP/MWM
98964188.1		Intel Corporation	Martyn W. Molyneaux	P/1235.EP/MWM
98964241.8		Intel Corporation	Martyn W. Molyneaux	P/1236.EP/MWM
98964295.4		Intel Corporation	Martyn W. Molyneaux	P/1251.EP/MWM
98964801.9		Intel Corporation	Martyn W. Molyneaux	P/1264.EP/MWM
98964908.2		Intel Corporation	Martyn W. Molyneaux	P/1237.EP/MWM
98964909.0		Intel Corporation	Martyn W. Molyneaux	P/1249.EP/MWM
98966115.2		Intel Corporation	Martyn W. Molyneaux	P/1258.EP/MWM
98966463.6		Intel Corporation	Martyn W. Molyneaux	P/1250.EP/MWM
98966750.6		Intel Corporation	Martyn W. Molyneaux	P/1255.EP/MWM
98966751.4		Intel Corporation	Martyn W. Molyneaux	P/1256.EP/MWM
99115116.8		Tektronix Japan, Ltd	Martyn W. Molyneaux	P/2281.EP/MWM
99117373.3		Tektronix Japan, Ltd	Martyn W. Molyneaux	P/2282.EP/MWM
99200597.5		Tandberg Television ASA	Martyn W. Molyneaux	P/1582.EP/MWM
99200599.1		Tandberg Television ASA	Martyn W. Molyneaux	P/1581.EP/MWM
99202208.7		Tandberg Television ASA	Martyn W. Molyneaux	P/1504.EP/MWM
99202925.6	0986264	Tandberg Television ASA	Martyn W. Molyneaux	P/1520.EP/MWM
99202926.4		Tandberg Television ASA	Martyn W. Molyneaux	P/1506.EP/MWM
99300505.7	0932045	Tektronix, Inc.	Martyn W. Molyneaux	P/1404.EP/MWM
99300552.9		Tut Systems, Inc.	Martyn W. Molyneaux	P/1400.EP/MWM
99300553.7	0936816	Tut Systems, Inc.	Martyn W. Molyneaux	P/1401.EP/MWM
99300611.3		Tut Systems, Inc.	Martyn W. Molyneaux	P/1417.EP/MWM
99300969.5	0939557	Tektronix, Inc.	Martyn W. Molyneaux	P/1405.EP/MWM
99301365.5		Tektronix, Inc.	Martyn W. Molyneaux	P/1033.EP/MWM
99301367.1	0940889	Tektronix, Inc.	Martyn W. Molyneaux	P/1032.EP/MWM
99302046.0		Intel Corporation	Martyn W. Molyneaux	P/1153.EP/MWM
99302335.7		Intel Corporation	Martyn W. Molyneaux	P/1163.EP/MWM
99302379.5		Intel Corporation	Martyn W. Molyneaux	P/1161.EP/MWM
99304795.0	0967811	Tektronix, Inc.	Martyn W. Molyneaux	P/1027.EP/MWM
99305732.2		Tektronix, Inc.	Martyn W. Molyneaux	P/1026.EP/MWM
99305733.0		Tektronix, Inc.	Martyn W. Molyneaux	P/1025.EP/MWM
99307105.9		Tektronix, Inc.	Martyn W. Molyneaux	P/1024.EP/MWM
99307173.7		Tektronix, Inc.	Martyn W. Molyneaux	P/1015.EP/MWM
99308763.4		Tektronix, Inc.	Martyn W. Molyneaux	P/1014.EP/MWM
99309035.6		Tektronix, Inc.	Martyn W. Molyneaux	P/1013.EP/MWM
99309053.9		Tektronix, Inc.	Martyn W. Molyneaux	P/1012.EP/MWM
99900759.4		Intel Corporation	Martyn W. Molyneaux	P/1261.EP/MWM
99901304.8		Intel Corporation	Martyn W. Molyneaux	P/1252.EP/MWM
99901331.1		Intel Corporation	Martyn W. Molyneaux	P/1265.EP/MWM
99902115.7		Intel Corporation	Martyn W. Molyneaux	P/1268.EP/MWM

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99902988.7		Intel Corporation	Martyn W. Molyneaux	P/1267.EP/MWM
99903207.1		Intel Corporation	Martyn W. Molyneaux	P/1266.EP/MWM
99903503.3		Intel Corporation	Martyn W. Molyneaux	P/1269.EP/MWM
99904046.2		Catalina Marketing International,	Martyn W. Molyneaux	P/1555.EP/MWM
99904394.6		Catalina Marketing International,	Martyn W. Molyneaux	P/1554.EP/MWM
99904395.3	1093643	Catalina Marketing International,	Martyn W. Molyneaux	P/1550.EP/MWM
99904479.5		Intel Corporation	Martyn W. Molyneaux	P/1272.EP/MWM
99909491.5		Catalina Marketing International,	Martyn W. Molyneaux	P/1544.EP/MWM
99909696.9		Intel Corporation	Martyn W. Molyneaux	P/1281.EP/MWM
99909866.8		Intel Corporation	Martyn W. Molyneaux	P/1287.EP/MWM
99911051.3		Intel Corporation	Martyn W. Molyneaux	P/1292.EP/MWM
99911158.6		Intel Corporation	Martyn W. Molyneaux	P/1285.EP/MWM
99911332.7		Intel Corporation	Martyn W. Molyneaux	P/1296.EP/MWM
99912295.5		Intel Corporation	Martyn W. Molyneaux	P/1290.EP/MWM
99912889.5		Intel Corporation	Martyn W. Molyneaux	P/1286.EP/MWM
99915030.3		Intel Corporation	Martyn W. Molyneaux	P/1288.EP/MWM
99919998.7		Intel Corporation	Martyn W. Molyneaux	P/1300.EP/MWM
99921423.2		Intel Corporation	Martyn W. Molyneaux	P/1293.EP/MWM
99923073.3		Intel Corporation	Martyn W. Molyneaux	P/1308.EP/MWM
99923231.7		Intel Corporation	Martyn W. Molyneaux	P/1310.EP/MWM
99924498.1		Intel Corporation	Martyn W. Molyneaux	P/1337.EP/MWM
99928599.2		Intel Corporation	Martyn W. Molyneaux	P/1325.EP/MWM
99930149.2		Intel Corporation	Martyn W. Molyneaux	P/1352.EP/MWM
99930601.2		Intel Corporation	Martyn W. Molyneaux	P/1315.EP/MWM
99930640.0		LEVEL ONE COMMUNICATIONS, INC.	Martyn W. Molyneaux	P/1319.EP/MWM
99930730.9		Intel Corporation	Martyn W. Molyneaux	P/1321.EP/MWM
99931960.1		LEVEL ONE COMMUNICATIONS, INC.	Martyn W. Molyneaux	P/1320.EP/MWM
99932251.4	1103147	Intel Corporation	Martyn W. Molyneaux	P/1318.EP/MWM
99932268.8		Intel Corporation	Martyn W. Molyneaux	P/1323.EP/MWM
99932401.5		Intel Corporation	Martyn W. Molyneaux	P/1327.EP/MWM
99937303.8		Intel Corporation	Martyn W. Molyneaux	P/1335.EP/MWM
99937306.1		Intel Corporation	Martyn W. Molyneaux	P/1330.EP/MWM
99937490.3		Intel Corporation	Martyn W. Molyneaux	P/1331.EP/MWM
99937558.7		Intel Corporation	Martyn W. Molyneaux	P/1345.EP/MWM
99940959.2		Intel Corporation	Martyn W. Molyneaux	P/1336.EP/MWM
99943752.8		Catalina Marketing International,	Martyn W. Molyneaux	P/1648.EP/MWM
99943771.8		Intel Corporation	Martyn W. Molyneaux	P/1340.EP/MWM
99945104.0		Intel Corporation	Martyn W. Molyneaux	P/1344.EP/MWM
99946984.4		Intel Corporation	Martyn W. Molyneaux	P/1353.EP/MWM
99946988.5		Intel Corporation	Martyn W. Molyneaux	P/1368.EP/MWM
99950183.6		Intel Corporation	Martyn W. Molyneaux	P/1354.EP/MWM
99950917.7		Tandberg Television ASA	Martyn W. Molyneaux	P/1430.EP/MWM
99951415.1		Intel Corporation	Martyn W. Molyneaux	P/1351.EP/MWM
99952952.2		Catalina Marketing International,	Martyn W. Molyneaux	P/1477.EP/MWM
99953082.7		Intel Corporation	Martyn W. Molyneaux	P/1069.EP/MWM
99954743.3		Intel Corporation	Martyn W. Molyneaux	P/1356.EP/MWM

The professional representative's address for the following cases will change to Harrison Goddard Foote, 40-43 Chancery Lane, London, WC2A 1JB, UK effective 2 January 2004 for Martyn W Molyneaux and effective 2 February 2004 for Clifford J Want.
Please amend your records accordingly.

Appln no	Patent	Applicant	Representative	Our ref
99954966.0		Intel Corporation	Martyn W. Molyneaux	P/1070.EP/MWM
99955129.4	1183675	Catalina Marketing International,	Martyn W. Molyneaux	P/1601.EP/MWM
99955557.6		Intel Corporation	Martyn W. Molyneaux	P/1311.EP/MWM
99956773.8		Intel Corporation	Martyn W. Molyneaux	P/1075.EP/MWM
99956812.4		Intel Corporation	Martyn W. Molyneaux	P/1074.EP/MWM
99958804.9		Intel Corporation	Martyn W. Molyneaux	P/1362.EP/MWM
99958949.2		Intel Corporation	Martyn W. Molyneaux	P/1366.EP/MWM
99960158.6		Intel Corporation	Martyn W. Molyneaux	P/1068.EP/MWM
99961539.6	1138157	Intel Corporation	Martyn W. Molyneaux	P/1079.EP/MWM
99961565.1		Intel Corporation	Martyn W. Molyneaux	P/1358.EP/MWM
99961579.2		Catalina Marketing International,	Martyn W. Molyneaux	P/1621.EP/MWM
99961599.0		Intel Corporation	Martyn W. Molyneaux	P/1361.EP/MWM
99963849.7		Intel Corporation	Martyn W. Molyneaux	P/1071.EP/MWM
99964954.4		Intel Corporation	Martyn W. Molyneaux	P/1089.EP/MWM
99965754.7		Catalina Marketing International,	Martyn W. Molyneaux	P/1665.EP/MWM
99966469.1		Intel Corporation	Martyn W. Molyneaux	P/1370.EP/MWM
99967318.9	1141846	Intel Corporation	Martyn W. Molyneaux	P/1374.EP/MWM
99967319.7		Intel Corporation	Martyn W. Molyneaux	P/1369.EP/MWM
99967516.8		Intel Corporation	Martyn W. Molyneaux	P/1373.EP/MWM
99968538.1		Intel Corporation	Martyn W. Molyneaux	P/1379.EP/MWM
99968965.6		Intel Corporation	Martyn W. Molyneaux	P/1377.EP/MWM
99968966.4		Intel Corporation	Martyn W. Molyneaux	P/1375.EP/MWM
99970538.7		Intel Corporation	Martyn W. Molyneaux	P/1066.EP/MWM
99971530.3		Intel Corporation	Martyn W. Molyneaux	P/1088.EP/MWM
99971531.1		Intel Corporation	Martyn W. Molyneaux	P/1087.EP/MWM
99971532.9		Intel Corporation	Martyn W. Molyneaux	P/1357.EP/MWM
99971533.7		Intel Corporation	Martyn W. Molyneaux	P/1090.EP/MWM
99971539.4		Intel Corporation	Martyn W. Molyneaux	P/1093.EP/MWM
99971540.2		Intel Corporation	Martyn W. Molyneaux	P/1092.EP/MWM
99971542.8		Intel Corporation	Martyn W. Molyneaux	P/1083.EP/MWM
99971543.6		Intel Corporation	Martyn W. Molyneaux	P/1085.EP/MWM
99971569.1		Intel Corporation	Martyn W. Molyneaux	P/1080.EP/MWM
99971611.1		Intel Corporation	Martyn W. Molyneaux	P/1078.EP/MWM
99971612.9		Intel Corporation	Martyn W. Molyneaux	P/1072.EP/MWM
99971613.7		Intel Corporation	Martyn W. Molyneaux	P/1073.EP/MWM
99972373.7		Intel Corporation	Martyn W. Molyneaux	P/1091.EP/MWM

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Wildman Harrold
Attorneys and Counselors

BY FACSIMILE

December 9, 2003

The European Patent Office,
Erhardstrasse 27,
D-80298 Munich,
GERMANY.

Dear Sirs,

Re: European Patent Appln. No. 00944619.6
IVIEWIT HOLDINGS, INC.
Our Ref: P/1739.EP/MWM

This is to advise that we withdraw our representation on the above numbered application.

Please acknowledge receipt by return of the attached copy letter.

Yours faithfully,
WILDMAN, HARROLD, ALLEN & DIXON LLP

MARTYN W. MOLYNEAUX

MWM/mmh

IVIEWIT HOLDINGS, INC.

P. Stephen Lamont
Chief Executive Officer
Direct Dial: 914-217-0038

By Facsimile and Electronic Mail

November 22, 2003

Martyn W. Molyneaux
Wildman, Harrold, Allen & Dixon
11th Floor, Tower 3
Clements Inn
London
WC2A 2AZ

Re: Written Statement and Answers to European Patent Appln. No. 00944619.6 on behalf of Iviewit Holdings, Inc., as Assignee

Dear Mr. Molyneaux:

As a collective declaration prefacing the answers to the Invitations to File Observations detailed below, the Company submits this Written Statement, substantially in the form submitted to the Office of Enrollment and Discipline of the United States Patent and Trademark Office ("OED/USPTO"), and a true copy of which is attached herein as Exhibit A.

Secondly, the Company wishes the European Patent Office ("EPO") to apply this Written Statement to all future Invitations to File Observations, if any, across its entire international patent portfolio attached herein as Exhibit B, until which time as OED/USPTO/EPO may initiate actions to right the many wrongs in the alleged knowing and willful improprieties in the filing of the Company's U.S. non-provisional patents applications, the subject matter and claims, for the most part, that were the bases for the subject matter and claims of their Paris Conference Treaty ("PCT") counterparts, evidenced by Exhibit B.

Moreover, in the series of allegations described herein, the Company is confident that the EPO will find a reasonable certainty that Messrs. Kenneth Rubenstein, Raymond A. Joao, William J. Dick, Steven Becker, and Douglas Boehm, all present or former members of the distinguished Bar of the USPTO, designed and executed, either for themselves or others similarly situated, the deceptions, improprieties, and, even in certain circumstances, outright misappropriation by the disingenuous redirection of the disclosed Company techniques by: (i) burying the critical elements of the inventions in patent applications; (ii) allowing the unauthorized use of Company

inventions under confidentiality agreements ("NDA's") without enforcement of said NDA's; (III) filing patent applications of their own or others based on the Company's inventions; (IV) knowingly submitting false statements and falsified documents done with the resulting fraud on the USPTO, the EPO, the Company's shareholders, and the Company's inventors.

Furthermore, as a result of the series of allegations enclosed, the Company is confident that your Office: (i) shall find the requisite merit to stand down any and all Invitations to File Observations until OED/USPTO/EPO initiates investigations; (ii) shall witness the OED/USPTO/EPO pass these allegations to a staff attorney for further investigation; (iii) shall further witness OED/USPTO/EPO instruct said staff attorney to institute a formal investigation, including questioning, requests for records, and other information from all parties involved; (iv) shall still further witness OED/USPTO/EPO refer said attorney's findings back to Harry Moatz in his capacity as Director of the OED/USPTO/EPO; (v) shall still further witness OED/USPTO/EPO present such findings to an appropriate committee for determinative review; and finally (vi) shall still further witness said committee of OED/USPTO/EPO to initiate disciplinary action against the alleged offending attorneys, and to right the many wrongs in the alleged knowing and willful improprieties in the filing of the U.S. non-provisional patent applications the subject matter and claims, for the most part, that were the bases for the subject matter and claims of their PCT counterparts of Exhibit B.

WRITTEN STATEMENT

In mid 1998, the Company's founder, Eliot I. Bernstein, among others ("Inventors"), came upon inventions pertaining to what industry experts have heretofore described as profound shifts from traditional techniques in video and imaging then overlooked in the annals of video and imaging technology. Factually, the technology is one of capturing a video frame at a 320 by 240 frame size (roughly, ¼ of a display device) at a frame rate of one (1) to infinity frames per second ("fps" and at the twenty four (24) to thirty (30) range commonly referred to as "full frame rates" to those expert in the industry). Moreover, once captured, and in its simplest terms, the scaled frames are then digitized (if necessary), filtered, encoded, and delivered to an agnostic display device and zoomed to a full frame size of 1280 by 960 at the full frame rates of 24 to 30 fps. The result is, when combined with other proprietary technologies, DVD quality video at bandwidths of 56Kbps to 6MB per second, at a surprising seventy five percent (75%) savings in throughput ("bandwidth") on any non-terrestrial digital delivery system such as digital terrestrial, cable, satellite, multipoint-multichannel delivery system, or the Internet, and a similar 75% savings in storage on mediums such as digital video discs ("DVD's") and the hard drives of personal video recorders. Moreover, said Company inventions, among others, are used on almost every digital camera or present screen technology that utilizes the feature of "digital zoom". Furthermore, industry observers who benefited from the Company's disclosures have gone on to claim "you could have put 10,000 engineers in a room for 10,000 years and they would never have come up with these ideas."

Not very well connected in emerging technologies, the Inventors contacted an accountant, Mr. Gerald Lewin, CPA of Goldstein Lewin & Co., Boca Raton, Fla., who in turns refers Inventors to Mr. Christopher Wheeler, a partner in the Florida office of Proskauer Rose LLP. Moreover, once Inventors present the technology to Wheeler, Wheeler in turn introduces

Inventors to Mr. Kenneth Rubenstein, a soon to be Proskauer partner, and the main protagonist of the Motion Pictures Experts Group ("MPEG" and the standards body for video technology) patent pool, wherein Rubenstein describes the technology as "novel..." claims that "he missed that..." that "he never thought of that..." that "this changes every thing..." and, paraphrasing, "this is essential to MPEG 2..."

Subsequently, Rubenstein factually becomes a member of the Advisory Board of the Company and is instrumental in securing investments based on his analysis of the inventions and that the aforementioned patent pools would soon pay royalties to the Company based on its inventions. Furthermore, when Rubenstein through Joao fail to properly list inventors, fail to file timely patent filings, fail to file inventions entirely, fail to file copyrights entirely and finally file patents that have been fraudulently changed without knowledge or consent of the inventors constituting a fraud on the USPTO, Wheeler then recommends another friend and patent attorney, William J. Dick of Foley & Lardner, Milwaukee, Wis. to undertake a correction of the errors of Rubenstein through Joao's filings. Beginning in the spring 2002, investigations began that showed that Raymond Joao had begun a series of his own patent filings (now totaling 90 patents filed in his own name) that many appear based on ideas and concepts learned from the Company. Moreover, in a similar time frame, it also became clear that the patent pools overseen by Rubenstein had also begun to use concepts learned by Rubenstein from Company disclosures sent to him and that Proskauer Rose clients introduced to the Company by Proskauer partners under NDA's were also beginning to use the technologies without authorization.

Furthermore, rather than the unearthing of the buried inventions by Rubenstein through Joao; Dick proceeds to undertake and continue to allegedly further fraud the USPTO by: (i) further compounding the problems by changing titles of applications without knowledge and consent of the inventors, changing the content of applications without knowledge and consent of the inventors, and applying incorrect math to a series of patent filings even after having been informed of the errors prior to filing by the inventors; and (ii) creates further problems as Dick, along with Brian G. Utley, former President & COO of the Company, together with other Foley & Lardner patent attorneys, Steven Becker and Douglas Boehm stage their own spectacular "grab" at the Company's inventions by filing a series of fraudulent patent applications in the name of Utley, their long time associate, sending said patent documents to Utley's home address, and failing to assign said patent applications to the Company, wherein the Foley & Lardner attorneys were fully cognizant of the inventors of said patent concepts that did not include Mr. Utley.

Still further, it is interesting to note and establishes a past conspiratorial behavior on the Company's inventions prosecuted by Foley & Lardner in that Mr. Utley and Mr. Dick had been involved in other patent misappropriations that led to the closure of a prior employer of Mr. Utley's, a one Diamond Turf Lawnmower in Florida; this information was not disclosed to the Company by Mr. Wheeler, Mr. Utley, or Mr. Dick, all who were aware of the past malfeasances. Moreover, these patent misappropriations, including the continued fraud of the USPTO, pertaining to the Company's inventions, by Dick, Becker, and Boehm have caused the Company the loss of enormous funds in the reassignment of the stolen inventions of which we are aware, and, perhaps, entire inventions of which we are not aware. Estimates to

correct many of the flaws in the current filings and file the missing and abandoned inventions have been projected to cost upwards of Two Hundred and Fifty Thousand U.S. Dollars (USD $250,000) to Five Hundred Thousand U.S. Dollars (USD $500,000), after the Company has already spent over One Million U.S. Dollars (USD $1,000,000) to file, then fix, and then further recover the stolen and damaged patents. It also is of interest to note that the Company cannot get an opinion from current counsel as to the ability to truly fix and recapture the lost and damaged patents.

Lastly, reference is made to: (i) a flow chart attached herein as Exhibit C as a graphical portrayal of how the named attorneys all have worked together, in a coordinated conspiratorial way and for their self serving purposes, in a civil as well as criminal conspiracy to deprive the Company and their inventors of their intellectual property rights; and (ii) a counterclaim filed in the State of Florida pertaining to many of the allegations ascribed to herein, attached as Exhibit D.

Finally, by highly respected firms and engineers alike, the value of these patents has been estimated to be several billion dollars annually, thus providing the motive for these events and the Company assesses further motive in the ability of these inventions, when combined with other proprietary technologies, to not only provide a competitive threat to, but to effectually trump, the MPEG patent pools overseen by Rubenstein and Proskauer Rose LLP.

ANSWERS

European Patent Appln. No. 00944619.6

- Attached herein as Exhibit E

Furthermore, on behalf of the Company, I request copies of all original documents filed on the Company's behalf and all communications and records thereto as a means for the Company to amend, if necessary, this Written Statement with subsequent allegations and the respective patent applications relating thereto. Moreover, I would request, if possible, that your Office also conduct a search into any and all patents filed relating to Messrs. Kenneth Rubenstein, Raymond Joao, Steven Becker, Douglas Boehm, William Dick, Brian Utley, and Real3D filed after August 1998, whether as inventors, attorney(s) of record, assignor, or any and all involvement whatsoever in any patent applications or patents issued as the Company is in need of knowing, as a result of the above allegations, that there are no further unpublished patent applications or patents issued that utilize the disclosed proprietary Company techniques described herein.

Finally, the Company requests, as indicated above, that the EPO stand down any and all Invitations to File Observations until OED/USPTO/EPO conducts an expedited review of the above referenced allegations and the Company has further requested OED/USPTO/EPO work in conjunction with the Bar Association of the State of New York pertaining to Mr. Rubenstein and Mr. Joao, with the Bar Association of the Commonwealth of Virginia with respect to Mr. Dick, with the Bar Association of the State of Wisconsin with respect to Mr. Becker (soon to be filed),

and, finally, with the Bar Association of the State of Illinois with respect to Mr. Boehm (soon to be filed).

Very truly yours,

IVIEWIT HOLDINGS, INC.

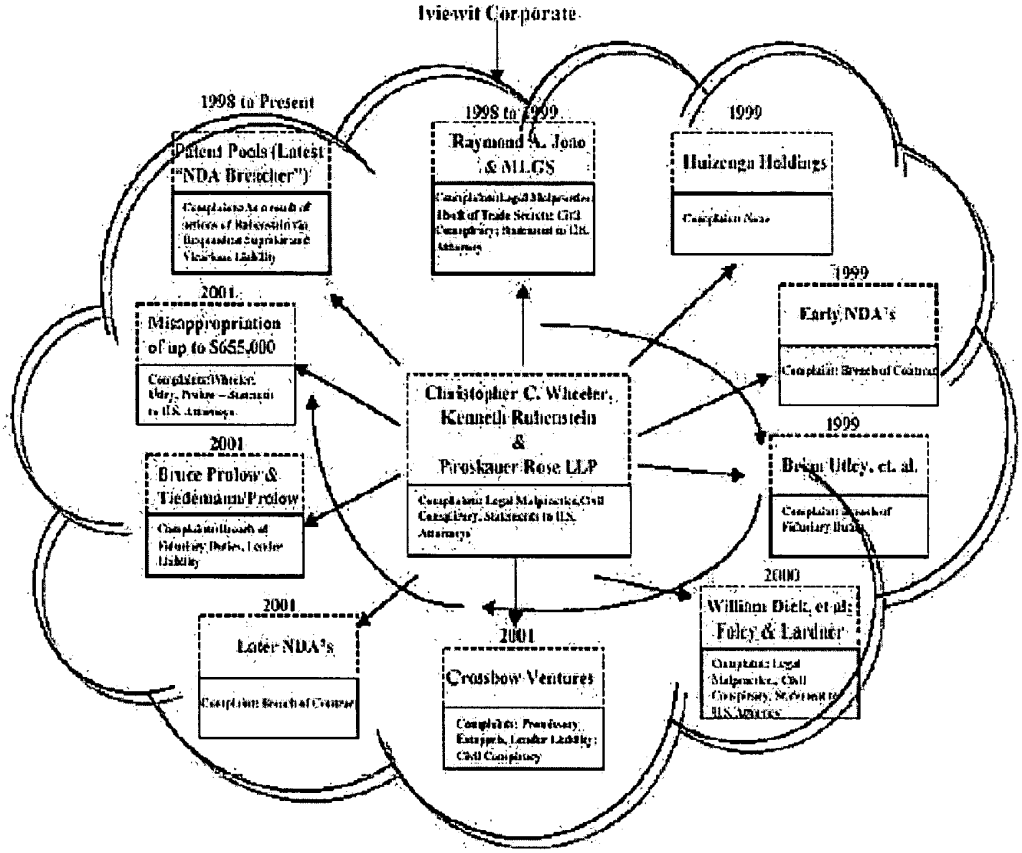
By: ✓ P. Stephen Lamont
Signature Valid
Digitally signed by P. Stephen Lamont
DN: cn=P. Stephen Lamont, o=Iviewit Technologies, Inc., ou=Corporate, c=US
Date: 2003.11.22 17:34:56 -05'00'

P. Stephen Lamont
Chief Executive Officer

By: ✓
Signature Valid
Digitally signed by Eliot I. Bernstein
DN: cn=Eliot I. Bernstein, o=I View It Holdings, Inc., c=US
Date: 2003.11.23 05:42:05 -05'00'
Location: Boca Raton, FL

Eliot I. Bernstein
President & Founder

Exhibit C


Ivie-wit Corporate
1998 to Present
Patent Pools (Latest "NDA Breecher")
1998 to 1999
Raymond A. Jono & MLGS
1999
Huizenga Holdings
2001
Misappropriation of up to $655,000
1999
Early NDA's
Christopher C. Wheeler, Kenneth Rubenstein & Piroskauer Rose LLP
2001
Bruce Prolow & Tiedemann/Prolow
1999
Brian Utley, et. al.
2000
William Diek, et al; Foley & Lardner
2001
Later NDA's
2001
Crossbow Ventures

P.B.5818 - Patentlaan 2
2280 HV Rijswijk (ZH)
(070) 3 40 20 40
FAX (070) 3 40 30 16

Europäisches Patentamt	European Patent Office	Office européen des brevets
Generaldirektion 1	Directorate General 1	Direction générale 1

Molyneaux, Martyn William
Wildman, Harrold, Allen & Dixon
11th Floor, Tower 3,
Clements Inn,
London WC2A 2AZ
GRANDE BRETAGNE

epoline® Customer Services
Tel.: +31 (0)70 340 45 00

Date 22-09-2003

Reference	Application No./Patent No.
P/1739.EP/MWM	00944619.6 - 1247
Applicant/Proprietor: Iviewit Holdings, Inc.	

Noting of loss of rights (R. 69(1) EPC)

The European Patent application is deemed to be withdrawn under Article 96(3) EPC, because the invitation to file observations on the communication from the Examining Division dated 02.12.02 was not complied with.

Request for decision
If the applicant considers that this finding is inaccurate, he may, within (a non-extendable period of) **two months** after notification of this communication, apply in writing for a decision on the matter by the European Patent Office (R. 69(2) EPC). The application can only lead to the finding being reversed, if this does not actually correspond to the factual or legal situation.

Further processing of the application
The legal consequence that the application is deemed withdrawn will be retracted if within (a non-extendable period of) **two months** after notification of this communication further processing of the European patent application under Article 121 EPC is requested in writing, the fee for further processing is paid in accordance with the Rules Relating to Fees, and the omitted act is completed.

EUROPÄISCHES PATENTAMT · EUROPEAN PATENT OFFICE · OFFICE EUROPÉEN DES BREVETS

Dubret, Françoise

Registered letter

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Europäisches Patentamt | European Patent Office | Office européen des brevets

Generaldirektion 2 | Directorate General 2 | Direction Générale 2

COPY

Molyneaux, Martyn William
Wildman, Harrold, Allen & Dixon
11th Floor, Tower 3,
Clements Inn,
London WC2A 2AZ
GRANDE BRETAGNE

Datum/Date
16. 06. 2003

Zeichen/Ref./Réf.	Anmeldung Nr./Application No./Demande n°./Patent Nr./Patent No./Brevet n°.
P/1739.EP/MWM	00944619.6-1247/US0015405

Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire
Iviewit Holdings, Inc.

EXTENSION OF TIME LIMIT PURSUANT TO RULE 84 EPC

Examination procedure

With reference to your request, the time limit for replying to the communication dated 02.12.02 has been extended

by 02 months

to a total of 08 months, (last extension)

from the date of notification of the above-mentioned communication.

Please note: To the extent that your request exceeded the above extension, your request has been refused.

Note:
The granting of extensions to time limits is governed by the implementing Regulations to the EPC and the Guidelines for Examination in the EPO, part E-VIII, 1.6.

If no reply to the communication is received in due time, the European patent application will be deemed to be withdrawn (Article 96(3) EPC).

For the Examining Division:

EUROPÄISCHES PATENTAMT · EUROPEAN PATENT OFFICE · OFFICE EUROPÉEN DES BREVETS MÜNCHEN

Tel. No.: (+31-70) 340-

Mrs. J. Offerman
tel: (070) 3403143
The Hague

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United Kingdom
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Martyn W. Molyneaux
+44 (20) 7841-5220
Molyneaux@wildmanharrold.com

Wildman Harrold
Attorneys and Counselors

BY FACSIMILE

June 2, 2003

The European Patent Office,
Erhardstrasse 27,
D-80298 Munich,
GERMANY.

Dear Sirs,

Re: European Patent Appln. No. 00944619.6
IVIEWIT HOLDINGS, INC.
Our Ref: P/1739.EP/MWM

In connection with the above application, we wish to request a further extension of term.

It has been necessary to refer this official communication to the applicant's local attorney via whom we are being instructed. The issues raised have made it impossible to secure instructions in sufficient time before the due date for reply and we therefore earnestly request a further extension.

We look forward to receiving your confirmation that this extension has been approved.

Please acknowledge receipt by return of the attached copy letter.

Yours faithfully,
WILDMAN, HARROLD, ALLEN & DIXON

MARTYN W. MOLYNEAUX

MWM/mmh

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Europäisches Patentamt | European Patent Office | Office européen des brevets

Generaldirektion 2 | Directorate General 2 | Direction Générale 2

Molyneaux, Martyn William
Wildman, Harrold, Allen & Dixon
11th Floor, Tower 3,
Clements Inn,
London WC2A 2AZ
GRANDE BRETAGNE

Datum/Date
10-04-2003

Zeichen/Ref./Réf.	Anmeldung Nr./Application No./Demande n°./Patent Nr ./Patent No./Brevet n°.
P/1739.EP/MWM	00944619.6-1247/US0015405

Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire
Iviewit Holdings, Inc.

EXTENSION OF TIME LIMIT PURSUANT TO RULE 84 EPC

Examination procedure

With reference to your request, the time limit for replying to the communication dated 02.12.02 has been extended

by two months

to a total of six months,

from the date of notification of the above-mentioned communication.

Please note: To the extent that your request exceeded the above extension, your request has been refused.

Note:
The granting of extensions to time limits is governed by the implementing Regulations to the EPC and the Guidelines for Examination in the EPO, part E-VIII, 1.6.

If no reply to the communication is received in due time, the European patent application will be deemed to be withdrawn (Article 96(3) EPC).

For the Examining Division:

Tel. No.: (+31-70) 340- 3143

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Attorneys and Counselors

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Molyneaux@wildmanharrold.com

March 26, 2003

The European Patent Office,
Erhardstrasse 27,
D-80298 Munich,
Germany.

Dear Sirs,

Re: European Patent Appln. No. 00944619.6
IVIEWIT HOLDINGS, INC.
Our Ref: P/1739.EP/MWM

We request an extension of term of two months.

The applicant is a non-European company. Instructions have not been received in time from our instructing attorney to enable us to file a reply within the originally set term.

We look forward to receiving your confirmation that this extension has been approved.

Please acknowledge receipt by return of the attached copy letter.

Yours faithfully,
WILDMAN, HARROLD, ALLEN & DIXON

MARTYN W. MOLYNEAUX

MWM/mmh

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Application No.	Ref.	Date
00 944 619.6-1247	P/1739.EP/MWM	02.12.2002
Applicant: Iviewit Holdings, Inc.		

Communication pursuant to Article 96(2) EPC

The examination of the above-identified application has revealed that it does not meet the requirements of the European Patent Convention for the reasons enclosed herewith. If the deficiencies indicated are not rectified the application may be refused pursuant to Article 97(1) EPC.

You are invited to file your observations and insofar as the deficiencies are such as to be rectifiable, to correct the indicated deficiencies within a period

of 4 months

from the notification of this communication, this period being computed in accordance with Rules 78(2) and 83(2) and (4) EPC.

One set of amendments to the description, claims and drawings is to be filed within the said period on separate sheets (Rule 36(1) EPC).

Failure to comply with this invitation in due time will result in the application being deemed to be withdrawn (Article 96(3) EPC).

EUROPÄISCHES PATENTAMT - EUROPEAN PATENT OFFICE - OFFICE EUROPÉEN DES BREVETS

GIANNOTTI P
Primary Examiner
for the Examining Division

Enclosure(s): 3 page/s reasons (Form 2906)

Registered Letter

The examination is being carried out on **the following application documents:**

Description:
Pages 1 to 23 as originally filed and published with WO 00/76218.

Claims:
Nos. 1 to 29 as filed on 28.1.02 with letter dated 24.1.02.

Drawings:
Sheets 1/3 to 3/3 as published with WO 00/76218.

*****

The following document is mentioned in this communication:

D1 JOSÉ ALVEAR: "Web Developer.com Guide to Streaming Multimedia " 9 April 1998 (1998-04-09) , JOHN WILEY & SONS , NEW YORK

*****

1. Independent claims 1, 13, 22, and 29 presently on file do not seem to based on any of the independent claims as originally filed. The Examining Division is currently of the opinion that the present claims define subject-matter which extends beyond the content of the application as filed, and are consequently not allowable under Article 123(2) EPC.

1.1 In particular, the method of present Claim 1 consists of the steps of 'receiving' and 'encoding', while none of the methods claimed in the application as originally filed consists of said steps. Claim 1 presents amendments -by way of omission and addition of features- with respect to any the method claims as originally filed, and for which no basis in the original application can be found.

1.2 As a matter of fact, the Applicant did not indicate which one of the independent claims as originally filed the present Claim 1 is based on, nor which part of the application as originally filed the amendments are taken from.

1.3 The attention of the Applicant is drawn to the fact that the application may not be amended in such a way that it contains subject-matter which extends beyond the content of the application as filed, Article 123(2) EPC. Moreover, amended claims may not relate to unsearched subject matter which does not combine with the originally claimed invention to form a single inventive concept, Rule 86(4) EPC.

1.4 In view of the foregoing, as the subject-matter of the present independent claims appears to extend beyond the content of the application as filed, the Examining Division is of opinion that the present claims are not allowable under Article 123(2) EPC.

1.5 In case of further prosecution of the present application, the Applicant is asked to review the claims, to indicate on which independent claims among those of the application as originally filed they are based, and to show in detail in which points of the original application documents the amendments are disclosed (see the Guidelines E-II, 1, last sentence).

2. In reviewing the claims, the following is to be taken into account.

2.1 Document D1 is considered to be the most relevant piece of prior art.

Document D1 offers explanations about several techniques to provide streaming video, illustrating a broad variety of embodiments. In particular, it is well known from D1 that video streaming entails: providing a source video signal having a predetermined source video parameter; compressing, encoding and converting the source video signal to a streaming digital video file; uploading the streaming digital video file to a network server; playing the streaming digital video file on the computer of the receiving user (see for example in D1, chapter 4 dedicated to the digital video basic elements, and chapter 11 dedicated to streaming video with the RealVideo technology; for compression before streaming, see page 71).

In particular, D1 explains that full-screen video is also foreseen (see D1, page 185, lines

1-3, or page 196, lines 27-30, or page 191, lines 3-10), together with streaming at a range of possible resolutions (for the 320x240 and 640x480 resolution, 30fps, see page 76 or page 70).

2.2 The new independent claims should be filed taking account of Rule 29(1) EPC. To meet the requirements of Rule 29(1) EPC the independent claims should be properly cast in the two part form, with those features which in combination are part of the prior art (see document D1) being placed in the preamble.

2.3 The independent claims should be drafted so as to define the matter for which protection is sought by referring to the features necessary to achieve the object of the present application. With respect to the independent claims to be filed, the Applicant is asked to clearly explain which technical problem is addressed, which solution is offered, what is the difference between the subject matter of the claims with respect to the prior art, and why inventive step is involved.

2.4 The dependent claims should be properly reviewed in the light of the necessary amendments to the claim from which they depend, and harmonized accordingly.

2.5 Reference signs in parentheses should be inserted in the claims to increase their intelligibility, Rule 29(7) EPC. This applies to all of the claims.

2.6 Amendments to the description according to Rule 27(1)(b) and (c) EPC are to be postponed until allowable claims are filed.

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Date
22.11.02

Reference	Application No./Patent No.
P/1739.EP/MWM	00944619.6-1247-US0015405
Applicant/Proprietor: Iviewit Holdings, Inc.	

Refund of fees

The following fee was paid in respect of the application 00944619.6:

Fee	Code	Voucher No	Date	Currency	Amount
Claims fee	015	00902336	13.12.01	EUR	1 800,00

According to the present state of the file the refund will be made by:

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Amount refundable:	Code	Currency	Amount	Voucher No
	015	EUR	1.040,00	00925837

Reason for refund: Overpayment.

The Authorising Officer
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EUROPÄISCHES PATENTAMT - EUROPEAN PATENT OFFICE - OFFICE EUROPÉEN DES BREVETS

EPO

From: Alfredo Moruzzi <amoruzzi@epo.org>
To: WIPO <PCT.IMPACT@wipo.int>
Date: Fri, Jan 25, 2002 11:22 AM
Subject: PCT/US00/15405 - EP 00944619.6

For this application the EPO has not yet received the copy of the priority document : US 60/169559 (08.12..1999).
Please provide us with the missing copy at your earliest convenience.

Thank you
Kind regards
Alfredo Moruzzi(Receiving Section)

P1 282564

3

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

August 07, 2000

THIS IS TO CERTIFY THAT ANNEXED HERETO IS A TRUE COPY FROM THE RECORDS OF THE UNITED STATES PATENT AND TRADEMARK OFFICE OF THOSE PAPERS OF THE BELOW IDENTIFIED PATENT APPLICATION THAT MET THE REQUIREMENTS TO BE GRANTED A FILING DATE UNDER 35 USC 111.

APPLICATION NUMBER: ***60/169,559***
FILING DATE: ***December 08, 1999***
PCT APPLICATION NUMBER: *PCT/US00/15405*

By Authority of the
COMMISSIONER OF PATENTS AND TRADEMARKS

L. Edelen

L. EDELEN
Certifying Officer

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PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53 (c).

jc662 U.S. PTO 12/08/99

jc541 U.S. PTO 60/169559 12/08/99

INVENTOR(S)		
Given Name (first and middle [if any])	Family Name or Surname	Residence (City and either State or Foreign Country)
ELIOT	BERNSTEIN	500 S.E. Mizner Road Suite 102 Boca Raton, FL 33432

[ ] *Additional inventors are being named on the ___ separately numbered sheets attached hereto*

TITLE OF THE INVENTION (280 characters max)

APPARATUS AND METHOD FOR PRODUCING ENHANCED VIDEO IMAGES AND/OR VIDEO FILES

CORRESPONDENCE ADDRESS

Direct all correspondence to:

[ ] Customer Number [ ] → *Type Customer Number here*

Place Customer Number Bar Code Label here

OR

[xx] Firm *or* Individual Name	RAYMOND A. JOAO, ESQ.				
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ENCLOSED APPLICATION PARTS *(check all that apply)*

[X] Specification *Number of Pages*	47	[ ] Small Entity Statement	
[X] Drawing(s) *Number of Sheets*	5	[X] Other (specify)	return postcard

METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT *(check one)*

[X] A check or money order is enclosed to cover the filing fees

[ ] The Commissioner is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number: [ ]

FILING FEE AMOUNT ($): $150.00

The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.

[X] No.

[ ] Yes, the name of the U.S. Government agency and the Government contract number are: _____

Respectfully submitted,

SIGNATURE [signature]

TYPED or PRINTED NAME RAYMOND A. JOAO

TELEPHONE 516-747-0300

Date 12/8/99

REGISTRATION NO. *(if appropriate)* 35,907

Docket Number: 5865-8

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

This collection of information is required by 37 CFR 1.51. The information is used by the public to file (and by the PTO to process) a provisional application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the complete provisional application to the PTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C., 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Box Provisional Application, Assistant Commissioner for Patents, Washington, D.C., 20231.

12-09-99 1/PROV

Attorney Docket No.: 5865-8

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:	Eliot I. Bernstein
Serial No.:	Please assign
Filed on:	Concurrently herewith
Title:	APPARATUS AND METHOD FOR PRODUCING ENHANCED VIDEO IMAGES AND/OR VIDEO FILES

Box Provisional Application
Assistant Commissioner for Patents
Washington, D.C. 20231

PROVISIONAL PATENT APPLICATION TRANSMITTAL LETTER

Sir:

Please find transmitted herewith for filing the following:

(1) Provisional Application for Patent Cover Sheet;

(2) Provisional Patent Application, including Specification, Claims and Abstract of the Disclosure (47 pages) and Drawings (5 sheets);

(3) Check in the amount of $150.00 for the filing fee;

(4) Power of Attorney form; and

(5) Return Receipt Postcard.

It is respectfully requested that the above papers be filed as a Provisional Patent Application.

Respectfully submitted,
MELTZER, LIPPE, GOLDSTEIN
& SCHLISSEL, P.C.

By: _____
Raymond A. Joao
Reg. No. 35,907

December 8, 1999

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I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated below and is addressed to: Box Provisional Application, Assistant Commissioner for Patents, Washington, D.C. 20231

Date of Deposit: December 8, 1999

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Attorney Docket No.: 5865-8

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

POWER OF ATTORNEY

Application of:	Eliot I. Bernstein
Serial No.:	Please assign
Filed on:	Concurrently herewith
Title:	APPARATUS AND METHOD FOR PRODUCING ENHANCED VIDEO IMAGES AND/OR VIDEO FILES

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of the sole inventor (given name, family name): **ELIOT I. BERNSTEIN**	
Inventor's signature: >	**Date:** > 12/8/99
Residence: 500 S.E. Mizner Boulevard Suite 102 Boca Raton, FL 33432-6080	**Citizenship:** U.S.A.
Post Office Address: SAME AS ABOVE	

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Attorney Docket No. 5865-8

APPARATUS AND METHOD FOR PRODUCING ENHANCED VIDEO IMAGES AND/OR VIDEO FILES

FIELD OF THE INVENTION

The present invention is directed to an apparatus and a method for producing enhanced images and/or video files and, in particular, to an apparatus and a method for producing enhanced resolution digital images and/or digital video files obtained via digital and/or film video cameras and/or recording devices.

BACKGROUND OF THE INVENTION

The fields of telecommunications, multimedia, and related areas, are growing at increasing rates. With this continued growth, the need for high resolution digital imagery, for utilization in conjunction with the corresponding technologies, is becoming greater. Current technologies utilize film cameras and recorders as well as digital cameras and recorders.

Conventional print film, negative and digital, technologies typically have very low zoom quality and low image size restrictions or limitations associated therewith. Generally speaking, enlarged images produce a higher resolution image, and an associated higher resolution scanning quality, which further facilitates an improved enlargement or reduction of the image for

different sizes and different depths, without pixel distortion. Photographs, negatives, and associated images, utilize pixels which typically have a certain size. When enlarged or reduced, these pixels of the image become distorted, a feature which typically results in the image being fixed to an original size, or being available at very low magnifications, such as, for example, magnifications of from 200 times to 300 times. These images are also difficult to enlarge to a full screen size without a tremendous amount of distortion present in the end product without expanding the file size proportionately.

Currently, panoramic imaging techniques utilize non-enlarged images as their starting point. With such associated limitations, the ability to provide enhanced resolution digital images and, especially, an enhanced resolution digital panoramic image, such as those utilized on, or over, the Internet and/or the World Wide Web, has been greatly compromised.

Another major drawback in the current technology lies in the fact that conventional processes often utilize panoramic lenses in order to capture an image. This practice has been criticized as creating distortions in the image immediately upon the image's enlargement or reduction. The conventional techniques associated with the use of panoramic lenses are known to result in image "bending", which further curtails one's ability to obtain

realistic views, especially upon performing any associated cropping and/or editing processes. In such instances, the upper end and the lower end of the image must be either erased, or covered, in order to prevent the flaw from being exposed. This typically results in the resulting image having a "fishbowl-type" distortion.

In some instances, 32 mm lenses have been utilized in order to obtain enhanced floor to ceiling images without experiencing image bending. In these applications, however, the ability of the lens to capture optimal images varies depending upon the scene or image being photographed.

Images have typically been over-compressed prior to transmission over a communication network. This over compression has typically resulted in lack of image quality.

As a result, the ability to obtain enhanced video images and/or video files from film cameras and film recorders, from negatives and from digital cameras and recorders, has been limited.

SUMMARY OF THE INVENTION

The present invention provides an apparatus and a method for

providing enhanced digital video images and/or digital video files which overcomes the shortcomings of the prior art. The digital images and/or digital files produced by utilizing the present invention can be easily managed, when displayed, projected, and/or posted on any viewing device and/or entity such as, but not limited to, an Internet Web server, Web site or Web page, television, intranet computers and/or servers, and/or computers and/or servers which are utilized in wireless environments, etc.

The present invention provides for the processing, production and/or transmission of streaming video which can be transmitted on, or over, a communication network, the Internet, the World Wide Web, and/or any other communication network and/or medium. The streaming video obtained and/or transmitted via the present invention can provide for a video transmission which, once commenced, need not be stopped. The streaming video which is facilitated via the present invention can be played on demand while maintaining its streaming video nature.

The present invention provides an apparatus and a method for producing enhanced digital video images and video files from video which may be recorded as print film image or file, a negative image or file, a digital magnetic representation of a video image, an analog representation of a video image, and/or a

digital video image and/or file. The video images and/or files may be obtained via a digital camera, a digital recording device, a digital recorder, a digital camcorder, a film video camera, a recorder, and/or camcorder, a motion picture camera, a VHS video camera, recorder, and/or camcorder, a beta video camera, recorder, and/or camcorder, and/or any other suitable video recording device. The camera or recorder can be a conventional device and/or a solid state device which may contain a solid state storage medium.

The video images and/or video files which are produced by the apparatus and method of the present invention have improved and enhanced resolution and require far less effort in the associated maintenance and management of same. The video images and/or files, which are produced by the apparatus and method of the present invention, can be utilized and displayed on computers, projection devices, televisions, and, as noted above, can be posted to an Internet Web server, a Web site, and/or a Web page, an intranet computer and/or server, and/or computers and/or servers utilized in wireless environments. The video images and/or files can be transmitted over a communication network and/or in computer-to-computer applications. The video images and/or files obtained may also be stored in an appropriate storage medium, such as, but not limited to, a compact disk, a digital video disk, and/or any other appropriate digital and/or

analog storage medium.

The present invention, in a preferred embodiment, is utilized to produce enhanced video images and/or files for posting and/or for downloading, to a digital display medium, which in the preferred embodiment, is an Internet and/or a World Wide Web server, a Web site, and/or Web page, and/or an intranet computer and/or server, and/or computers and/or servers which are utilized in a wireless environment, and/or a compact disk, a digital video disk, and/or other suitable storage medium. In this manner, enhanced video images and/or video files can be produced from video images and/or video files which can be recorded using any video recording device and recording medium such as, but not limited to, digital cameras, digital recorders, film cameras, film recorders, motion picture cameras, photographic film recorders, and/or magnetic film or disk film recorders, etc. The video images and/or files obtained are thereafter processed in accordance with the apparatus and method of the present invention in order to produce enhanced video images and/or video files.

These resulting video images and/or video files have enhanced resolution which is unaffected by the typical resolution limiting and degrading parameters and phenomena which are associated with conventional digital and/or film video cameras,

recorders and corresponding processing equipment, methods and/or techniques.

The apparatus can include a video camera or recorder which can be any one of an analog camera and/or a digital camera, an analog and/or digital recording device, an analog and/or digital camcorder, a film camera, a film recording device, and/or a film camcorder. For full motion video, a 3CCD chip, and/or any other appropriate and/or suitable motion video capture recording device, can be utilized in conjunction with the present invention. A suitable audio capture device for digitizing any audio which accompanies and/or which corresponds to the video can also be utilized. The camera or recording device can be a hand-held camera, a fixed camera, and/or a camera which is mountable, such as on a tripod or on a stand. The camera can be utilized to obtain the video image and/or video file which will be processed in accordance with the present invention. The camera can also be a video recording device for recording both video and audio.

The present invention preserves image and/or video integrity, as well preserves the integrity of any audio, from the point of capture of the image through and including any final compression or compressions of same. The apparatus can also include a developing device, which can be utilized for developing video images and/or files which are obtained on film. In the

case of video images and/or files which are obtained digitally, no developing device would be needed. The apparatus can also include an enlarging device which can be utilized to enlarge the video images obtained. An enlarger can be utilized for enlarging either film images and/or digital images.

The apparatus can also include a computer, for performing the various processing routines during operation of the apparatus and method of the present invention. The computer may be a personal computer, a laptop computer, a mini-computer, a microcomputer, a mainframe computer, a network computer, a server computer, and/or any other suitable computer or computer system, television system, either of the conventional, digital, and/or high definition variety.

The computer can include a central processing unit (CPU), a read only memory (ROM), a random access memory (RAM), a display device, an input device and an output device. The input device may include a keyboard, a mouse, or other pointing device, and/or any other data and/or command input device, for allowing for data and/or command input by a user. The output device may include a printer and, in the preferred embodiment, the printer may be a color laser printer or a color inkjet printer, a compact disk recorder, a digital video disk recorder, and/or any other suitable storage medium recorder. The computer can also include

a receiver for receiving data and/or information over a communication network and a transmitter for transmitting data and/or information over the communication network.

The computer can also include a video capture device, which may or may not be an integral component of the computer. The computer can also include an audio capture device which may or may not be an integral component of the computer. The video capture can also be an external peripheral device. Video data and/or information, as well as any audio data and/or information, is utilized, can be fed into, and/or played through, the respective video capture device and audio capture device, thereby digitizing the respective video data and/or information and audio data and/or information. The present invention preserves the integrity of any and/or all data and/or information upon conversion to digital formats. If full motion video is captured, any conversion can utilize full motion capture software and/or hardware. The video data and/or information can be fed into, and/or through, the video capture device, in real-time, thereby facilitating real-time video transmissions. In a similar fashion, the audio data and/or information can be fed into, and/or through, the audio capture device, in real-time, thereby facilitating real-time audio transmissions.

The computer can also include any other hardware device or

peripheral device and/or software which is, or which may be, needed and/or desired in order to perform any of the functions and/or operation described herein. The computer can also include a video data capture device, for capturing and processing the video images and/or files processed by the present invention, as well as an audio data capture device, for capturing and processing the audio files processed by the present invention.

The apparatus can also include a scanning device, for scanning video images or files, if needed, whether they be of a digital or of a print film type, in order to obtain a digital image representation of same.

The apparatus and method of the present invention provides video images and/or files, as well as any accompanying audio files, which have enhanced resolution and quality while requiring less file management efforts.

The resulting video images and/or files, and any accompanying audio files, which are obtained via the apparatus and method of the present invention are characterized by a high definition resolution and are suitable for high definition television, Web television, and large, full screen, panoramic Internet applications, including video playback and/or video transmission, along with any accompanying audio, while preserving

resolution upon image and/or video file magnification or reduction.

The present invention also facilitates high speed file transfers of high resolution video images and/or video files, and any accompanying audio files, thereby dispensing with the need to engage in long and slow conventional file downloads and/or file transfers in order to maintain viewing quality.

The apparatus and method of the present invention can also be utilized in conjunction with three-dimensional images and video files in order to produce high resolution, three-dimensional video images and/or video files.

Accordingly, it is an object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files from files obtained via digital and/or film video cameras and/or a recording devices.

It is another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files from files obtained via digital and/or film video cameras and/or a recording devices, which have improved and enhanced resolution.

It is still another object of the present invention to provide an apparatus and a method for processing, producing, and/or transmitting streaming video for use on, or over, a communication network.

It is another object of the present invention to provide an apparatus and a method for producing streaming video which, once commenced, need not be stopped and/or halted during the subsequent transmission of same.

It is another object of the present invention to provide an apparatus and a method for producing streaming video which can be played continuously and on-demand.

It is yet another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, and accompanying audio files, from files obtained via digital and/or film video cameras and/or a recording devices, which have improved and enhanced resolution.

It is still another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, from files obtained via digital and/or film video cameras and/or a recording

devices digital images, which are suitable for display and/or for downloading to a digital computer, a television, and/or any other communication device utilized in a telecommunication environment and/or communications environment.

It is still another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, from files obtained via digital and/or film video cameras and/or a recording devices, which are characterized by image compression and/or minimal image compression thereby avoiding any dramatic loss in image quality.

It is another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, from files obtained via digital and/or film video cameras and/or a recording devices, which may dispense with the need to compress the image data.

It is yet another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, from files obtained via digital and/or film video cameras and/or a recording devices, which are characterized by high definition resolution, and which are suitable for high definition television, Web television and

large, full screen, panoramic internet applications, without loss of resolution upon image magnification or reduction.

It is another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, from files obtained via digital and/or film video cameras and/or a recording devices, which can be transmitted in a network environment.

It is still another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, from files obtained via digital and/or film video cameras and/or a recording devices, which facilitates high speed file transfer in a network environment and/or in a computer environment.

It is another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, which preserves image integrity from the point of capture of the image through and including final compression or compressions.

It is still another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, which

preserves the integrity of any and/or all data and/or information upon conversion to digital formats.

Other objects and advantages of the present invention will be apparent to those skilled in the art upon a review of the Description of the Preferred Embodiment taken in conjunction with the Drawings which follow.

BRIEF DESCRIPTION OF THE DRAWINGS

In the Drawings:

Figure 1 illustrates the apparatus of the present invention, in block diagram form; and

Figures 2 illustrates a method of the present invention, in flow diagram form; and

Figures 3a, 3B and 3C illustrate another method of the present invention, in flow diagram form.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The present invention provides an apparatus and a method for providing enhanced digital video images and/or digital video, as

well as any accompanying audio, files which can be utilized and which can be easily managed, when displayed, projected, and/or posted on any viewing device and/or entity such as, but not limited to, an Internet Web server, Web site or Web page, television, etc. In particular, the present invention provides an apparatus and a method for producing enhanced digital video images and video files from video, as well as any accompanying audio files, which may be recorded as a digital video image and/or files and/or as a film video image and/or file a print film image.

The present invention provides for the processing, production and/or transmission of streaming video which can be transmitted on, or over, a communication network, the Internet, the World Wide Web, and/or any other communication network and/or medium. The streaming video obtained and/or transmitted via the present invention can provide for a video transmission which, once commenced, need not be stopped. The streaming video which is facilitated via the present invention can be played on demand while maintaining its streaming video nature.

The video images and/or files, and any accompanying audio files, may be obtained via a digital camera, a digital recording device, a digital recorder, a digital camcorder, a film video camera, recorder, and/or camcorder, a VHS video camera, recorder,

and/or camcorder, a beta video camera, recorder, and/or camcorder, and/or any other suitable video recording device. The video images and/or video files and any accompanying audio files, which are produced by the apparatus and method of the present invention have improved and enhanced resolution and require far less effort in the associated maintenance and management of same. The video images and/or files, and any accompanying audio files, which are produced by the apparatus and method of the present invention, can be utilized, displayed, and/or played, whichever the case may be, on computers, projection devices, televisions, and, as noted above, can be posted to an Internet Web server, a Web site, and/or a Web page. The video images and/or files, and any accompanying audio files, can be transmitted over a communication network and/or in computer-to-computer applications.

The present invention, in a preferred embodiment, is utilized to produce enhanced video images and/or files, and any accompanying audio files, for posting and/or for downloading, to a digital display medium, which in the preferred embodiment, is an Internet and/or a World Wide Web server, a Web site, and/or Web page. In this manner, enhanced video images and/or video files, and any accompanying audio files, can be produced from video images and/or video files, and accompanying audio files, which can be recorded using any video recording device and

recording medium such as, but not limited to, digital cameras, digital recorders, film cameras, film recorders, etc. The video images and/or files, and any accompanying audio files, obtained are thereafter processed in accordance with the apparatus and method of the present invention in order to produce enhanced video images and/or video files.

These resulting video images and/or video files, and any accompanying audio files, have enhanced resolution which is unaffected by the typical resolution limiting parameters and phenomena which are associated with conventional digital and film video cameras, recorders and corresponding processing equipment, methods and/or techniques.

Figure 1 illustrates the apparatus of the present invention which is denoted generally by the reference numeral 100, in block diagram form. With reference to Figure 1, the apparatus 100 includes a video camera or recorder 105 which, in the preferred embodiment, can be any one of a digital camera, a digital recording device, digital camcorder, a film camera, a film recording device, and/or a film camcorder. The camera or recorder can be a conventional device and/or a solid state device which may contain a solid state storage medium.

The camera or recording device can record video as well as

audio data and/or information. In the preferred embodiment, the camera 105 may be a hand-held camera, a fixed camera, and/or a camera which is mountable, such as on a tripod or on a stand. The camera 105 is utilized to obtain the video image and/or video file, as well as any audio files, which will be processed as described herein.

For full motion video, a 3CCD chip, and/or any other appropriate and/or suitable motion and/or video capture recording device, can be utilized in conjunction with the present invention. A suitable audio capture recording device can also be utilized in conjunction with the present invention.

The present invention can also be utilized in conjunction with any imaging and/or any video recording device, and/or audio recording device, and/or equipment, such as, but not limited to, those devices and equipment utilized in, or in conjunction with, medical imaging equipment, devices and/or instruments, motion picture production equipment, devices and/or instruments and/or in any other equipment, device, and/or instrument, which is, or which can be, utilized in conjunction with imaging and/or video and/or audio applications and/or uses.

The apparatus 100 also includes a developing device 115, which could be utilized for developing video images and/or files

which are obtained on film. In the case of video images and/or files which are obtained digitally, no developing device may be needed. The apparatus also includes an enlarging device which can be utilized to enlarge the video images obtained. The apparatus can include an enlarger for both film images as well as for digital images.

The apparatus 100 also includes a computer 120, for performing the various processing routines during operation of the apparatus and method of the present invention. The computer 120 may be a personal computer, a laptop computer, a mini-computer, a microcomputer, a mainframe computer, a network computer, a server computer, and/or any other suitable computer or computer system.

The computer 120 includes a central processing unit (CPU), a read only memory (ROM), a random access memory (RAM), a display device, an input device and an output device. The input device may include a keyboard, a mouse, or other pointing device, and/or any other data and/or command input device, for allowing for data and/or command input by a user. The output device may include a printer and, in the preferred embodiment, the printer may be a color laser printer or a color inkjet printer. The computer 120 also includes a receiver for receiving data and/or information over a communication network and a transmitter for transmitting

data and/or information over the communication network.

The computer 120 also includes a video capture device 121A and an audio capture device 121B, which, in the preferred embodiment, are integral components of the computer 120. The video capture device 121A, in the preferred embodiment, can be a video capture card 121A which is located internal to the computer 120. The video capture device 121A may also be an external peripheral device. As described herein, the video data and/or information is fed into, and/or played through, the video capture device 121A, thereby digitizing the video data and/or information. The video data and/or information can be fed into, and/or through, the video capture card 121A, in real-time, thereby facilitating real-time video transmissions.

In a similar manner, the audio capture device 121B, in the preferred embodiment, can be an audio capture card 121B which is located internal to the computer 120. The audio capture device 121 may also be an external peripheral device. As described herein, the audio data and/or information is fed into, and/or played through, the audio capture device 121B, thereby digitizing the audio data and/or information. The audio data and/or information can be fed into, and/or through, the audio capture card 121B, in real-time, thereby facilitating real-time audio transmissions.

The computer 120 may also include any other hardware device or peripheral device and/or software which is, or which may be needed and/or desired in order to perform any of the functions and/or operation described herein. In particular, the computer 120 will also include a video data capture device for capturing and processing the video images and/or files processed by the present invention. The computer 120 can also include an audio capture device for capturing and processing the audio files processed by the present invention.

The computer 120 also includes a transmitter (not shown) and a receiver (not shown) for facilitating operation in a network environment and/or as a server computer.

The apparatus 100 also includes a scanning device 125, for scanning video images or files, if needed, whether they be digital or of a print film type, in order to obtain a digital image representation of same. Any suitable computer or scanner, and any suitable scanning software, may be utilized in conjunction with the present invention. In a preferred embodiment, any suitable scanning device can be utilized in conjunction with any appropriate software.

Figure 2 illustrates a preferred embodiment method of the present invention, in flow diagram form. With reference to

Figure 2, the method of the present invention commences at step 200. The method described herein can be utilized to process both video and audio files as well as files which contain only video information. For the sake of explaining the present invention in a preferred embodiment, the processing of video files along with corresponding audio files is described below. At step 201, the video images or files, and corresponding audio files, are recorded with any appropriate or suitable recording device such as, but not limited to, the video recording camera 105. The video and corresponding audio can be recorded and/or otherwise obtained in any suitable format, such as, but not limited to, for example, beta, VHS, digital, and/or any other standard formats, including, but not limited to, NTSC, PAL, or SECAM. The video and corresponding audio files can also be obtained in other standard digital formats such as, but not limited to, IEEE1834, *.AVI, *.MOV, *.MPEG, etc., by utilizing an appropriately equipped video recording device. The video recording device 105 may also be a reel-to-reel recording device and/or a live video recording device.

At step 202, the respective digital files and corresponding audio files, are converted to digital files, if necessary, by utilizing respective digitizing and/or scanning hardware and/or software and/or devices. In the case of the video files, the video is digitized by utilizing digitizing hardware and/or software and/or any other necessary and/or appropriate driver

software or programs in conjunction with a video capture device. In the preferred embodiment, hardware such as Pinnacle DC10∞ or other equivalent and/or similar hardware and/or software and/or associated drivers can be utilized to perform the video digitizing operation. The video digitizing step can be performed, in the preferred embodiment, at a minimum frames per second (fps) or at least a television standard and/or 30fps and with frame sizes of at least 320 X 240 pixels.

It is understood that the herein-described video digitizing step is not limited to the settings and/or parameters described herein. Rather, any appropriate settings and/or parameters may be utilized in order to obtain digital video data and/or information which is consistent with the digital data and/or information described herein.

In an analogous manner, at step 201, the audio files are also digitized by utilizing appropriate digitizing or capture hardware and/or software and any other necessary and/or appropriate driver software or programs. In the preferred embodiment, hardware such as produced by Turtle Beach Montego∞ other equivalent and/or similar hardware and/or software, and any associated drivers, if needed, are utilized in order to perform the audio digitizing operation. The audio digitizing step can be performed, in the preferred embodiment, by utilizing PCM or an

equivalent and/or similar technique and at a sampling rate of at least 44 to 48 kilohertz (Khz), 16-bit stereo, and an audio resolution of at least 16-bits.

The video and/or audio files which are obtained via the processing routines at step 201, are digital files which can be in any standard digital format such as, but not limited to, *.AVI, *.MOV, or *.MPEG, and/or any other suitable digital file format. While video information can be obtained for any frame setting, in a preferred embodiment, frames settings of 320 x 240, 480 x 320 and/or 640 x 480 can be utilized.

At step 202, if desired the digitized video and audio files can be processed in conjunction with video editing software, such as, for example Adobe Premiere 5.1 and/or any other equivalent and/or similar editing software. The processing which is performed at step 202 is optional and need not be performed on the digital video and audio files. The processing which is performed on the digital video and audio files , at step 202, can be performed in order to facilitating the editing of the respective digital video and audio files if such may be desired.

The processing at step 202 also serves to convert the digital video and audio to respective digital formats which are amenable to various editing procedures. For example, a *.MOV formatted file is converted to a .RM file format, a *.AVI

formatted fire is converted to a .ASF file format, and a *.MPEG formatted file is converted to a .RM file format. The processing step which is performed at the optional step 202 can be preformed with the following processing parameters.

At step 203, the digital video and audio file is processed and/or encoded in order to generate the respective files for presentation from a player or server computer. The processing which occurs at step 203 is accomplished with Windows Media Encoder/Reel Producer Plus software in order to create digital files for both video and audio which are in an appropriate digital file format, such as, but not limited to .RM and .ASF, or other suitable and/or similar digital file formats. Thereafter, the digital video and audio files will be available for transmission to appropriate computers and/or communication devices, and/or for storage onto an appropriate storage medium.

The digital video and audio file, which is processed and encoded at step 203, can be transmitted at a data rate having a range of between 35Kbps to 750Kbps and can have a frame rate range of between 24 to 29.97 fps.

At step 204, the video and audio file can be transmitted from the sever computer 120 to a client computer or communication device. In the preferred embodiment, and in order to facilitate the presentation of the video and audio file at the client

computer or communication device, the presentation of the video and audio file can be accomplished in conjunction with video software such as, but not limited to, RealPlayer∞, MediaPlayer∞, and/or any other appropriate software. The transmission of the video and audio will take place with a data rate range of between 35 Kbps to 750 Kbps at with a frame rate range of between 24fps - 29.97fps.

The obtained video and audio file or files can then be posted to the computer 120 and/or to another hosting computer. If the posting is to a computer other than the computer 120, the posting is performed by transmitting the video file or files over a communication network to the hosting computer. In the preferred embodiment, the video and audio file or files are posted via the Internet, and/or the World Wide Web, and can posted to a Web Page, a Web site, and/or any other network device. The posting operation is performed by utilizing any suitable posting software. The video and audio file or video file can also be stored on a compact disk, a digital video disk and/or any other appropriate storage medium.

The above-describe processing routine facilitates the processing of digital video and audio files in such a manner that any compression, if performed, is maintained at minimum levels.

The respective video and audio files are digitized at an optimal level and thereafter encoded at an optimal level, thereby preserving the highest quality of video and audio content.

Transmission of the video and audio files to a client computer (not shown) can thereafter commence at step 205.

Typically, the various rates of transmission for the above transmission parameters will be dependent upon the type and specifications of the receiver or modem associated with the client computer or communication device. In another preferred embodiment, the server computer 120 can ascertain the receiver or modem specifications. Thereafter, the server 120 can process the information obtained regarding the client computer or communication device and determine the appropriate transmission rates and/or other parameters and commence transmission to the client computer or communication device at step 205.

Operation of the apparatus will then cease at step 206.

Figures 3A, 3B and 3C illustrate another preferred embodiment method of the present invention, in flow diagram form. With reference to Figures 3A, 3B and 3C, the method of the present invention commences at step 300. At step 301, the video images and/or files are recorded with the video camera 105. The video can be recorded in any format, such as, but not limited to,

i.e., beta, VHS, digital, and/or any of the standard file formats, including, but not limited to, *.AVI, *.MOV, *.MPEG, etc., by utilizing the video recording device 105. The video recording device 105 may also be a reel-to-reel recording device and/or a live video recording device.

At step 302, the video images and/or files are converted to a converted to digital files, if necessary, by utilizing the scanner 110. At step 303, digital video image files are loaded into the computer 120 for processing. At step 304, the video image files are fed into, or through, the capture device 121A of the computer 120. The video capture operation, which is performed by the video capture device 121A, in the preferred embodiment, can be performed with minimum compression and/or encoding operations being performed on the video image files and/or with only minimal compression and/or encoding operations being performed on the video image files.

The video capture device 121A, in the preferred embodiment, can be any suitable video capture device or card and/or any other appropriate and/or suitable video capture hardware. The capture software utilized can be any appropriate and/or suitable video capture software.

At step 305, the video images and/or files are edited, if

necessary, by using any standard video editing tools, such as, for example, any editing software. At step 306, the video image files are then converted to any suitable real video format such as, for example, a *.RM format. At step 307, the size of the video within the file code is set either manually or automatically. In the preferred embodiment, the size of the video is set within the file code, which may or may not be the HTML file code to a 640 x 480 frame resolution, or any other suitable resolution, such as, but not limited to, 800 x 600, 1024 x 768, 1280 x 1024, 1600 x 1200 or other sizes.

At step 308, the obtained video image file or files is then posted to the computer 120 and/or to another hosting computer. If the posting is to a computer other than the computer 120, the posting is performed by transmitting the video file or files over a communication network to the hosting computer. In the preferred embodiment, the video file or files are posted via the Internet, and/or the World Wide Web, and can posted to a Web Page, a Web site, and/or any other network device. The posting operation is performed by utilizing any suitable posting software. The video image file or video file can also be stored on a compact disk, a digital video disk and/or any other appropriate storage medium.

At step 309, the computer 120 or other hosting computer

generates or writes a file or script, such as an ASCII file which calls the video to stream or to download. This results in video which will stream or "streaming" video for a full screen application which will be characterized by a good clarity and quality. At step 309, the video file can then be transmitted to a client computer (not shown). At step 309, a separate file or script, such as an ASCII file is written and saved to an appropriately formatted file, such as an *.RPM file, or other suitable file format, which will call the original video file. This script can be typically included in any suitable code, such as an HTML code.

In the case of MPEG videos, Steps 301 through 303 are followed as described above. At step 304, however, the video file is converted, if not previously converted, to an MPEG format. Thereafter, the video is inserted into the appropriate file which may contain suitable coding, such as HTML codes. Thereafter, the file can be sized to any of herein-described resolutions. Thereafter, the video file is uploaded to the hosting computer, if utilized. Thereafter, the MPEG file is played from the computer 120 or the hosting computer, the Web page, and/or the Web site, depending upon the application, by first downloading a small portion of the file and by playing the file through a suitable device such as a player which supports any suitable video formats, such as AVI, MPEG-type, etc., and/or

other suitable formats.

Thereafter, operation of the apparatus ceases at step 310.

The processing steps described herein provide for the production of video images and/or video files which have enhanced resolution and which can be easily and effectively managed in applications involving the display of same, the posting of same, to a host computer, a Web server, a Web site, a Web page, a computer display, a full screen projection display and/or a video presentation and/or playback of same, respectively. Further, the method of the present invention provides for image processing, including various image and/or file processing techniques, which may or may not include image compression and/or encoding operations.

The apparatus and method of the present invention provides video images and/or files which have enhanced resolution and quality while requiring less file management efforts.

The resulting video images and/or files, and any accompanying audio files, which are obtained via the apparatus and method of the present invention are characterized by a high definition resolution and are suitable for high definition television, Web television, and large, full screen, panoramic

Internet applications, including video playback and/or video transmission, which preserving resolution upon image and/or video file magnification or reduction. The present invention also facilitates high speed file transfers of high resolution video images and/or video files, and any accompanying audio files, thereby dispensing with the need to engage in long and slow conventional file downloads and/or file transfers.

The apparatus and method of the present invention can also be utilized in conjunction with three-dimensional images and video files in order to produce high resolution, three-dimensional video images and/or video files.

The present invention preserves image integrity from the point of capture of the image through, and including, any final compression or compressions of same.

The resulting video images and/or files, and any accompanying audio files, which are obtained via the apparatus and method of the present invention, can be utilized, in any and/or all of the embodiments described herein, in conjunction with data and/or information which can be provided by any other and/or any external information source. The data and/or information may contain, but is not limited to, data and/or information of and for sound and/or audio files, text files,

video files, image files, and/or graphics files, and/or any other information source, data, information and/or file, which can be, and/or which may be linked to or with, and/or which can be operated and/or utilized in conjunction with, any video and/or image data and/or information. For example, any image and/or video data, information, or file, obtained via the present invention, can be utilized in conjunction with any sound file, audio file, text file, video file, image file, and/or graphics file, and/or any other data, information and/or file utilized in a multimedia environment, thereby providing for the utilization of enhanced images and/or video in conjunction with the respective file.

As noted above, the present invention provides for the processing, production and/or transmission of streaming video which can be transmitted on, or over, a communication network, the Internet, the World Wide Web, and/or any other communication network and/or medium. The streaming video obtained and/or transmitted via the present invention can provide for a video transmission which, once commenced, need not be stopped. The streaming video which is facilitated via the present invention can be played on demand while maintaining its streaming video nature.

While the present invention has been described and

illustrated in various preferred embodiments, such descriptions are merely illustrative of the present invention and are not to be construed to be limitations thereof. In this regard, the present invention encompasses any and all modifications, variations, and/or alternate embodiments, with the scope of the present invention being limited only by the claims which follow.

CLAIMS

What Is Claimed Is:

1. An apparatus for producing a digital image, comprising:

a device for generating a digital signal file from an image; and

a processor for processing said digital signal file and for generating an image file,

wherein said processor generates a first signal file from said digital signal file, and further wherein said processor processes said first signal file and generates said image file.

2. The apparatus of claim 1, further comprising:

one of a camera and a recording device for obtaining one of a photographic representation of an image, a film image, a negative image and a digital image.

3. The apparatus of claim 2, further comprising:

a developing device for developing one of said photographic representation of an image, a film image and a negative image.

4. The apparatus of claim 3, further comprising:

an enlarging device for enlarging said image.

5. The apparatus of claim 4, further comprising:

a scanning device for generating said digital signal file from said one of photographic representation of an image, a film image and a negative image.

6. The apparatus of claim 1, further comprising:

a video capture device for one capturing and processing said digital signal file.

7. The apparatus of claim 1, wherein said first signal file is an image file.

8. An apparatus for producing a digital image, comprising:

means for generating a digital signal file from an image file; and

means for processing said digital signal file and for generating an image file,

wherein said processing means generates a first signal file from said digital signal file, and further wherein said processing means processes said first signal file and generates said image file.

9. The apparatus of claim 8, further comprising:

means for obtaining said one of a photographic representation of an image, a film image, a negative image and a digital image.

10. The apparatus of claim 8, further comprising:

means for developing said one of photographic representation of an image, a film image and a negative image.

11. The apparatus of claim 8, further comprising:

means for enlarging said image.

12. The apparatus of claim 8, further comprising:

means for generating said digital signal file from said image.

13. The apparatus of claim 8, further comprising:

means for one of capturing and processing said digital signal file.

14. A method for producing a digital image, comprising:

generating a digital signal file from an image;

processing said digital signal file; and

generating an image file, wherein said processing operation further comprises:

generating a first signal file from said digital signal file; and

processing said first signal file and generating said image file.

15. The method of claim 14, further comprising:

obtaining one of a photographic representation of an image, a film image, a negative image and a digital image.

16. The method of claim 14, further comprising:

developing said one of photographic representation of an image, a film image, and a negative image; and

generating said image.

17. The method of claim 14, further comprising:

enlarging said image.

19. The method of claim 14, further comprising:

generating said digital signal file from said image.

20. The method of claim 14, further comprising:

one of capturing and processing said digital signal file.

21. The apparatus of any one of claims 1 to 13, wherein said

image file is utilized in conjunction with at least one of a sound file, an audio file, a text file, a video file, an image file, and a graphics file.

22. The method of any one of claims 14 to 20, wherein said image file is utilized in conjunction with at least one of an audio file, a text file, a video file, an image file, and a graphics file.

23. An apparatus for producing a streaming video file, comprising:

a device for generating a digital signal file from a first video file; and

a processor for processing said digital signal file and for generating a second video file,

wherein said processor generates a first signal file from said digital signal file, and further wherein said processor processes said first signal file and generates said second video file, and further wherein said second video file is a streaming video file.

24. The apparatus of claim 23, further comprising:

one of a camera and a recording device for obtaining one of a photographic representation of an image, a film image, a negative image, a digital image, a video file, and a motion

picture.

25. The apparatus of claim 24, further comprising:

a developing device for developing one of said photographic representation of an image, a film image and a negative image, a digital image, a video file, and a motion picture.

26. The apparatus of claim 25, further comprising:

an enlarging device for enlarging said photographic representation of an image, a film image, a negative image, a digital image, a video file, and a motion picture video file.

27. The apparatus of claim 24, further comprising:

a scanning device for generating said digital signal file from said one of photographic representation of an image, a film image, a negative image photographic representation of an image, a film image and a negative image, a digital image, a video file, and a motion picture.

28. The apparatus of claim 23, further comprising:

a video capture device for one capturing and processing at least one of said video file and said digital signal file.

29. The apparatus of claim 23, wherein said first signal file is

a video image file.

30. The apparatus of claim 23, wherein said streaming video file is one of posted to a host computer and stored on a storage medium.

31. The apparatus of claim 30, wherein said storage medium is at least on of a compact disk, a digital video disk, a floppy disk, and solid state device.

32. The apparatus of claim 23, wherein said streaming video file can be transmitted at least one of on demand and continuously.

33. An apparatus for producing a streaming video file, comprising:

means for generating a digital signal file from a first video file; and

means for processing said digital signal file and for generating a second video file,

wherein said processing means generates a first signal file from said digital signal file, and further wherein said processing means processes said first signal file and generates said second video file, and further wherein said second video file is a streaming video file.

34. The apparatus of claim 33, further comprising:

means for obtaining one of a photographic representation of an image, a film image, a negative image, a digital image, a video file, and a motion picture.

35. The apparatus of claim 34, further comprising:

means for developing one of said photographic representation of an image, a film image and a negative image, a digital image, a video file, and a motion picture.

36. The apparatus of claim 35, further comprising:

means for enlarging said photographic representation of an image, a film image, a negative image, a digital image, a video file, and a motion picture video file.

37. The apparatus of claim 33, further comprising:

means for generating said digital signal file from said one of photographic representation of an image, a film image, a negative image photographic representation of an image, a film image and a negative image, a digital image, a video file, and a motion picture.

38. The apparatus of claim 33, further comprising:

means for one capturing and processing at least one of said video file and said digital signal file.

39. The apparatus of claim 33, wherein said first signal file is a video image file.

40. The apparatus of claim 33, wherein said streaming video file is one of posted to a host computer and stored on a storage medium.

41. The apparatus of claim 40, wherein said storage medium is at least on of a compact disk, a digital video disk, a floppy disk, and solid state device.

42. The apparatus of claim 33, wherein said streaming video file can be transmitted at least one of on demand and continuously.

43. A method for producing a streaming video file, comprising:

generating a digital signal file from a first video file; and

processing said digital signal file and generating a second video file,

wherein said first signal file is generated from said digital signal file, and further wherein said first signal file is utilized to generate said second video file, and further wherein said second video file is a streaming video file.

44. The method of claim 43, further comprising:

obtaining one of a photographic representation of an image, a film image, a negative image, a digital image, a video file, and a motion picture.

45. The method of claim 44, further comprising:

developing one of said photographic representation of an image, a film image and a negative image, a digital image, a video file, and a motion picture.

46. The method of claim 45, further comprising:

enlarging said photographic representation of an image, a film image, a negative image, a digital image, a video file, and a motion picture video file.

47. The method of claim 43, further comprising:

generating said digital signal file from said one of photographic representation of an image, a film image, a negative image photographic representation of an image, a film image and a negative image, a digital image, a video file, and a motion picture.

48. The method of claim 43, further comprising:

one capturing and processing at least one of said video file and said digital signal file.

49. The method of claim 43, wherein said first signal file is a video image file.

50. The method of claim 43, wherein said streaming video file is one of posted to a host computer and stored on a storage medium.

51. The method of claim 50, wherein said storage medium is at least on of a compact disk, a digital video disk, a floppy disk, and solid state device.

52. The apparatus of claim 43, wherein said streaming video file can be transmitted at least one of on demand and continuously.

ABSTRACT OF THE DISCLOSURE

An apparatus and method for producing a digital image, including a device for generating a digital signal file from an image and a processor for processing said digital signal file and for generating an image file. The processor generates a first signal file from the digital signal file. The processor processes the first signal file and generates the image file. An apparatus for producing a streaming video file, including a device for generating a digital signal file from a first video file and a processor for processing the digital signal file and for generating a second video file. The processor generates a first signal file from the digital signal file. The processor processes the first signal file and generates the second video, wherein the second video file is a streaming video file.

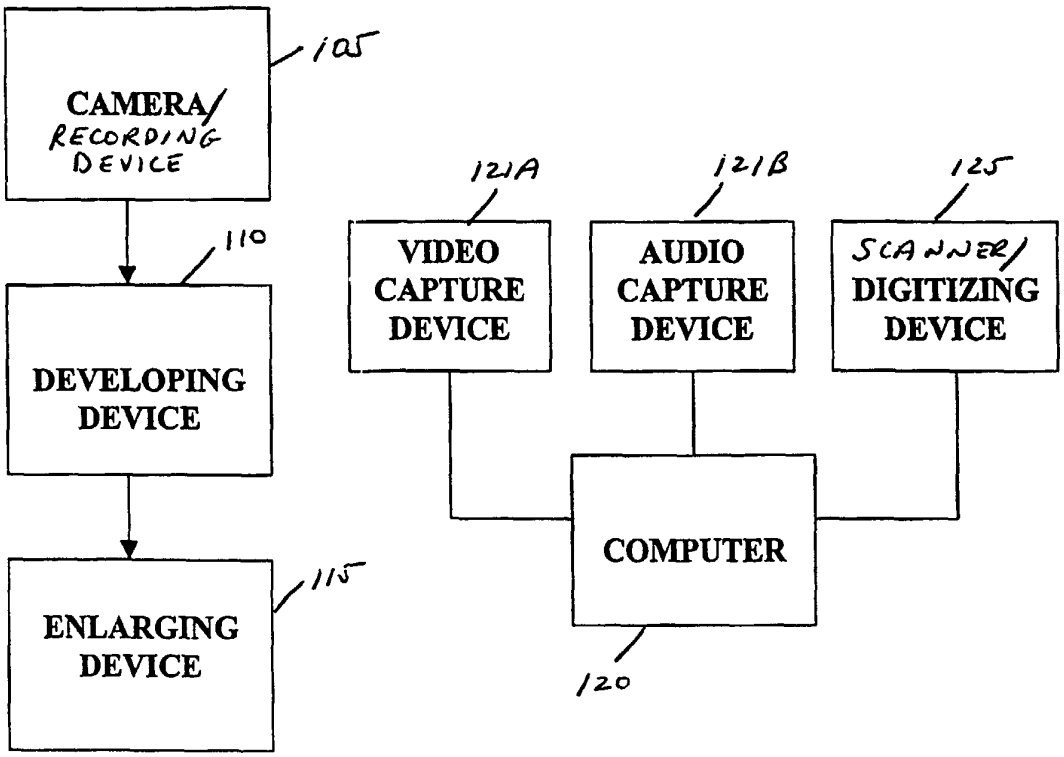
CAMERA/ RECORDING DEVICE
105
110
DEVELOPING DEVICE
ENLARGING DEVICE
115
121A
VIDEO CAPTURE DEVICE
121B
AUDIO CAPTURE DEVICE
125
SCANNER/ DIGITIZING DEVICE
COMPUTER
120
100

FIG. 1

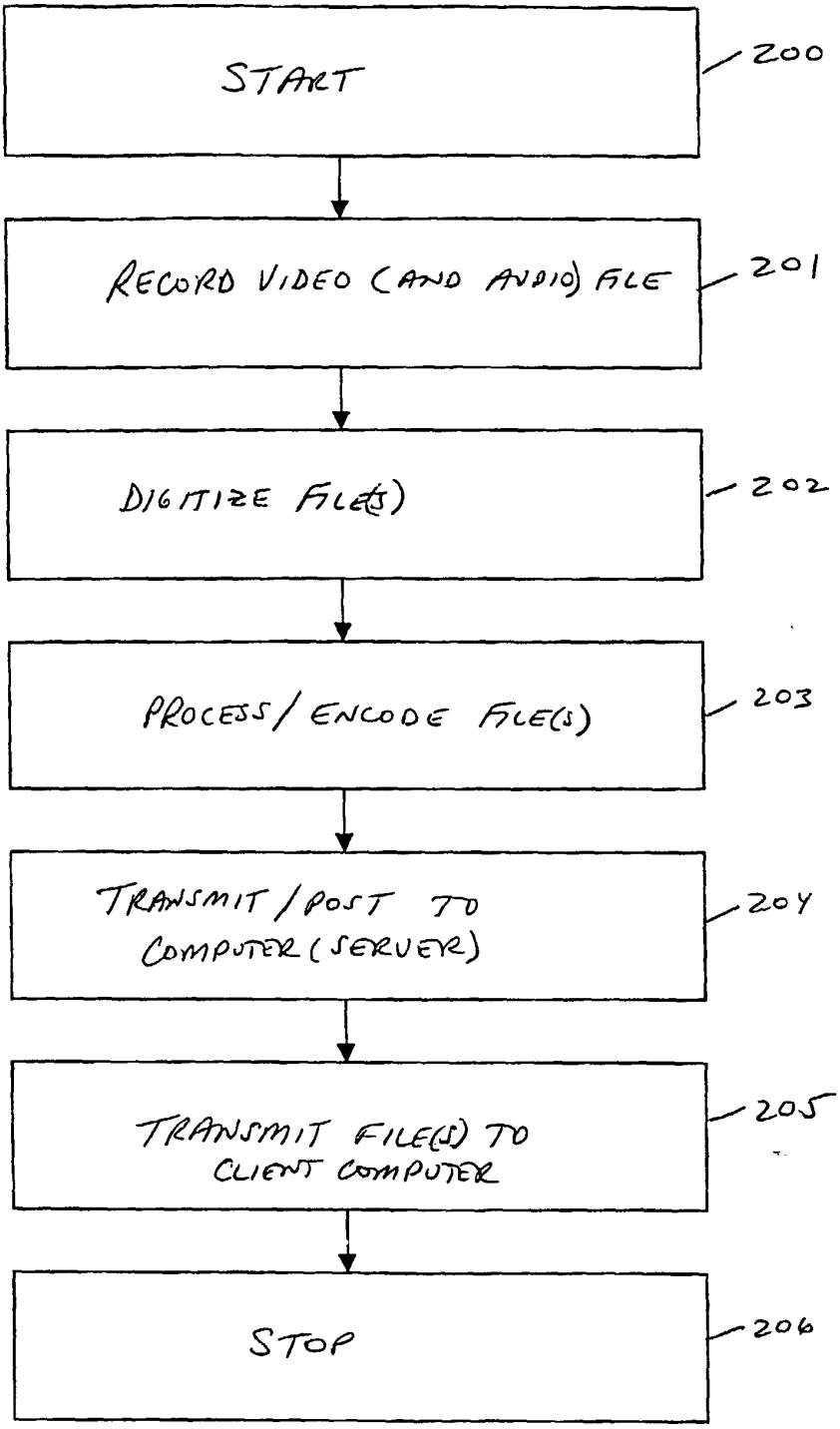
START
200
RECORD VIDEO (AND AUDIO) FILE
201
DIGITIZE FILE(S)
202
PROCESS / ENCODE FILE(S)
203
TRANSMIT / POST TO COMPUTER (SERVER)
204
TRANSMIT FILE(S) TO CLIENT COMPUTER
205
STOP
206

FIG. 2

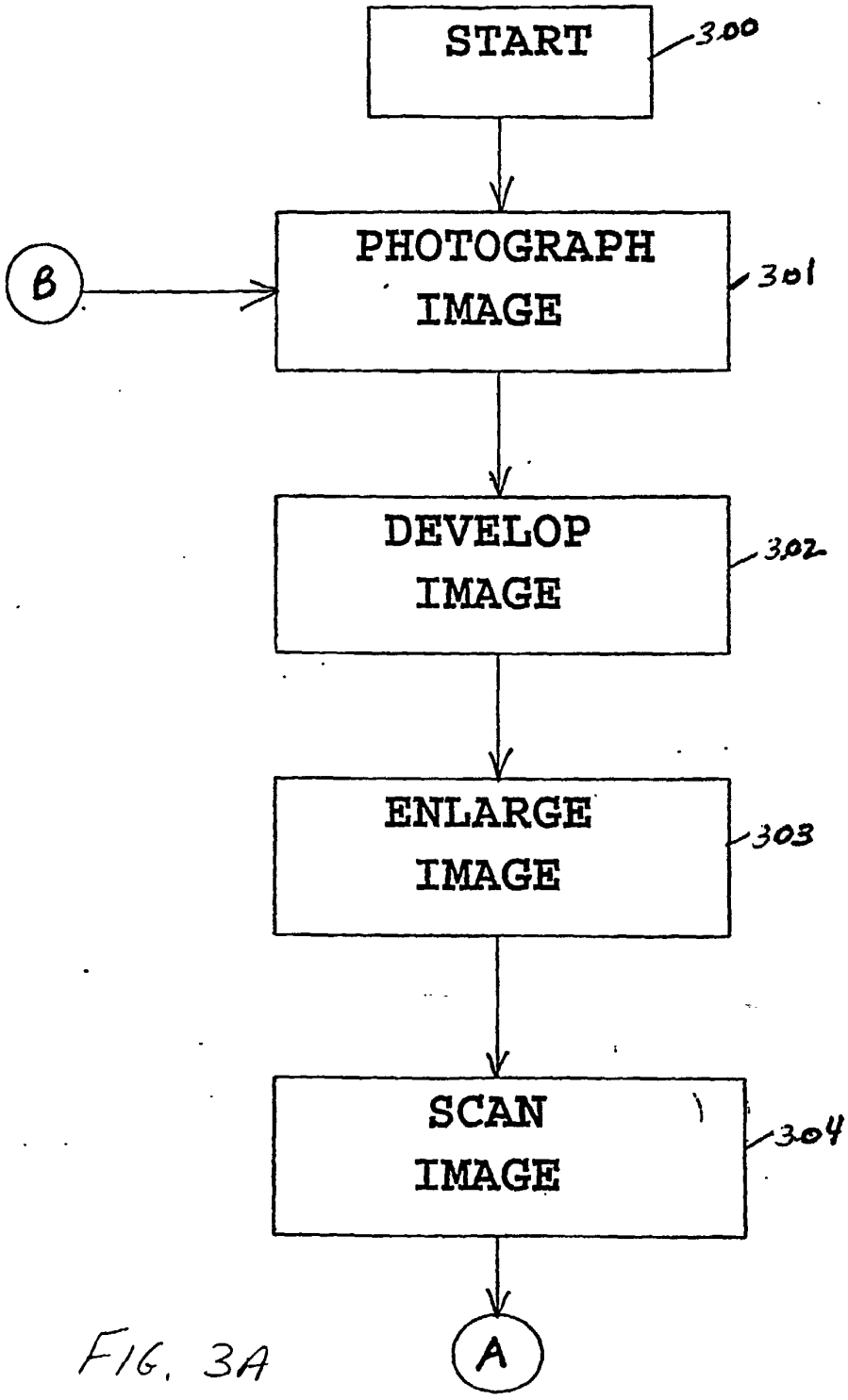
START
300
PHOTOGRAPH IMAGE
301
B
DEVELOP IMAGE
302
ENLARGE IMAGE
303
SCAN IMAGE
304
A

FIG. 3A

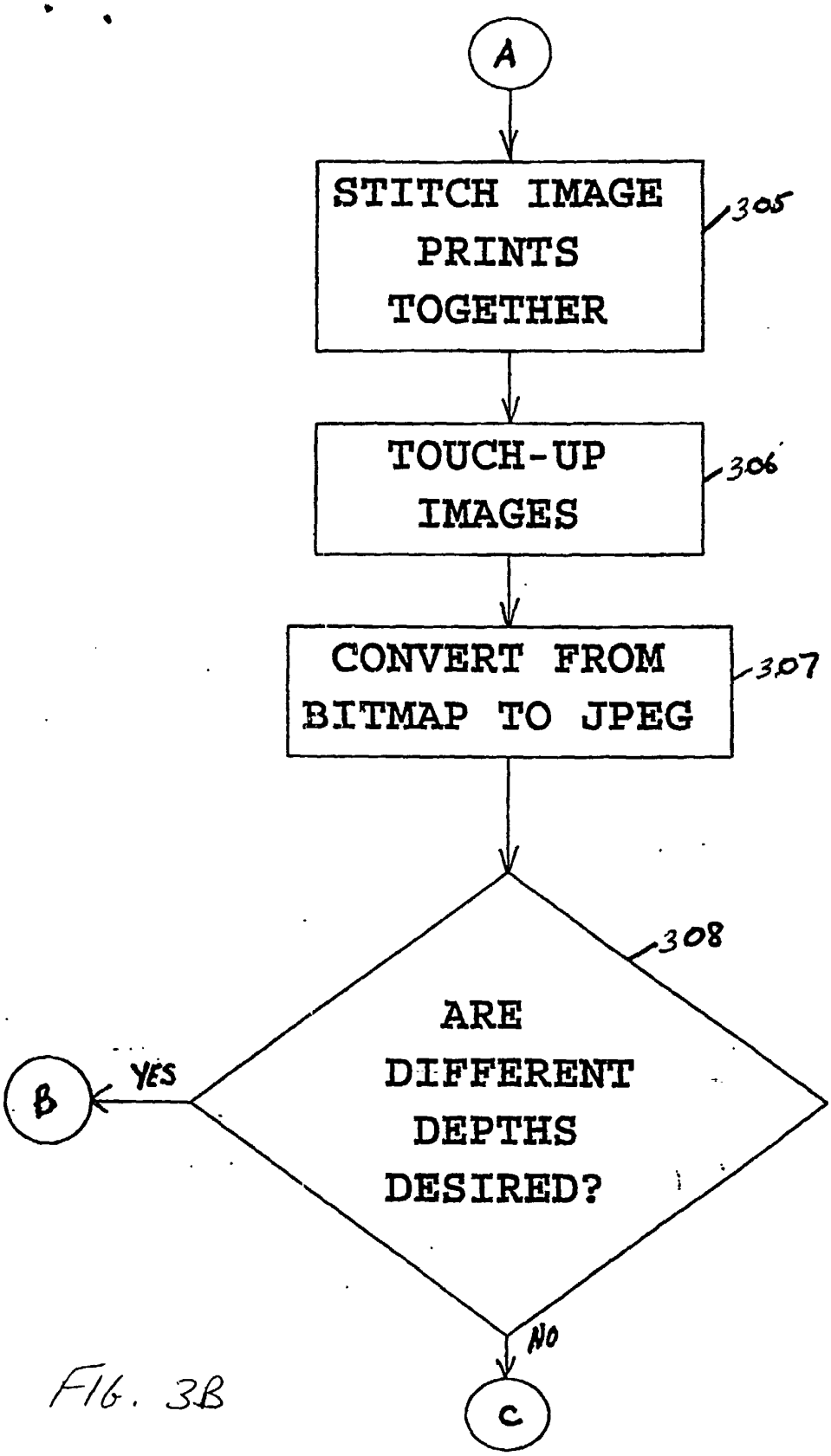
A
STITCH IMAGE PRINTS TOGETHER
305
TOUCH-UP IMAGES
306
CONVERT FROM BITMAP TO JPEG
307
ARE DIFFERENT DEPTHS DESIRED?
308
YES
B
NO
C

FIG. 3B

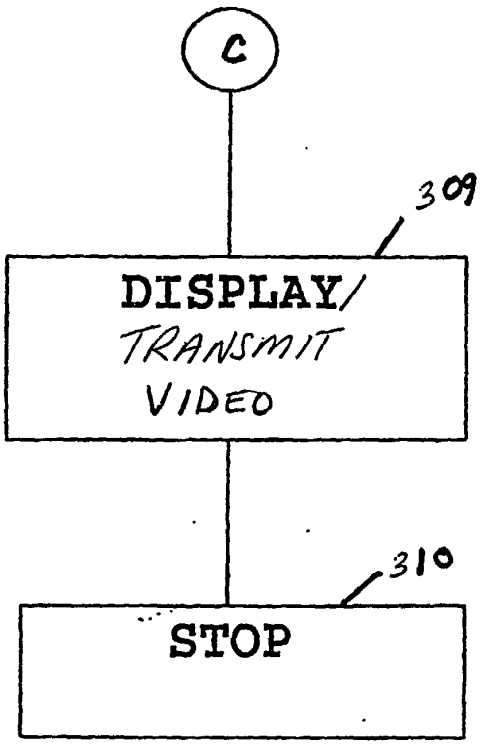

FIG. 3C

EUROPEAN PATENT OFFICE

MAILED	18 Feb 2002
WIPO	PCT

PCT Document Dissemination Unit
e-mail: PCT.IMPACT@wipo.int

	Received on		
PCT/US00/15405	18 Feb 2002	**Documents enclosed :**	PDOC n° 60/169,559
WO 00/076218		**Notes :**	The PDOC n° 60/137,297 has not been received yet
PCT/US00/15437	18 Feb 2002	**Documents enclosed :**	IPER
WO 00/074595		**Notes :**	The PDOC n° 09/455,299 has not been received yet
PCT/US00/15513	18 Feb 2002	**Documents enclosed :**	PDOC n° 09/335,361
WO 00/078249		**Notes :**	-
PCT/US00/15527	18 Feb 2002	**Documents enclosed :**	PDOC n° 60/137,817
WO 00/075352		**Notes :**	-
PCT/US00/15573	18 Feb 2002	**Documents enclosed :**	IPER - PDOC n° 09/327,760
WO 00/075717		**Notes :**	-
PCT/US00/15691	18 Feb 2002	**Documents enclosed :**	PDOC n° 60/138,105
WO 00/074600		**Notes :**	-
PCT/US00/15924	18 Feb 2002	**Documents enclosed :**	PDOC n° 09/328,647
WO 00/075982		**Notes :**	-

EPO - DG 1

18. 02. 2001

(37)

Total : 154

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Europäisches Patentamt
Eingangs-stelle

European Patent Office
Receiving Section

Office européen des brevets
Section de Dépôt

Molyneaux, Martyn William
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11th Floor, Tower 3,
Clements Inn,
London WC2A 2AZ
GRANDE BRETAGNE

Datum/Date
12-02-2002

Zeichen/Ref./Réf.	Anmeldung Nr./Application No./Demande n°./Patent Nr ./Patent No./Brevet n°.
P/1739.EP/MWM	00944619.6-1247-US0015405
Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire: Iviewit Holdings, Inc.	

COMMUNICATION PURSUANT TO RULES 109 AND 110 EPC

(1) Amendment of application documents, especially the claims (Rule 109 EPC)

The above-mentioned international (Euro-PCT) application has entered the European phase - or can do so, once the necessary conditions are fulfilled.

Under Articles 28, 41 PCT, Rules 52, 78 PCT and Rule 86(2) to (4) EPC, the applicant may amend the application documents after receiving the international search report.

Whether or not he has already done so, he now has a further opportunity to file amended claims or other application documents within a non-extendable time limit of ONE MONTH after notification of the present communication (Rule 109 EPC).

The claims applicable on expiry of the above time limit, i.e. those filed on entry into the European phase or in response to the present communication, will form the basis for any supplementary search to be carried out unter Article 157(2) EPC (Rule 109 EPC).

--2/

REGISTERED LETTER

(2) Claims fees under Rule 110 EPC

If the application documents on which the European grant procedure is to be based comprise more than ten claims, a claims fee shall be payable for the eleventh and each subsequent claim within the period provided for in Rule 107(1) EPC.

[✔] All necessary claims fees have already been paid.

[ ] The claims fee due for the claims .... were not paid within the above-mentioned period.

These fees or claims fees which are calculated on basis of amended claims pursuant to Rule 109 EPC may still be validly paid within a non-extendable period of grace of ONE MONTH after notification of this communication.

If a payment is made for only some of the claims, it must be indicated for which claims it is intended. If a claims fee is not paid in due time, the claim concerned is deemed to be abandoned (Rule 110(4) EPC).

If claims fees have already been paid, but on expiry of the above-mentioned time limit there is a new set of claims containing fewer fee-incurring claims than previously, the claims fees in excess of those due under Rule 110(2), 2nd sentence, EPC will be refunded (Rule 110(3) EPC).

You are reminded that any supplementary search under Article 157(2) EPC will relate only to the last set of claims applicable on expiry of the above time limit AND will be confined to those fee-incurring claims for which fees have been paid in due time.

The fee for the eleventh and each subsequent claim is 40 EUR.

RECEIVING SECTION

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GRANDE BRETAGNE

Datum/Date
06/02/02

Zeichen/Ref./Réf.	Anmeldung Nr./Application No./Demande n°./Patent Nr ./Patent No./Brevet n°.
P/1739.EP/MWM	00944619.6-1247 / 1188318

Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire
Iviewit Holdings, Inc.

NOTIFICATION OF EUROPEAN PUBLICATION NUMBER AND INFORMATION ON THE APPLICATION OF ARTICLE 67(3) EPC

The provisional protection under Article 67(1) and (2) EPC in the individual Contracting States becomes effective only when the conditions referred to in Article 67(3) EPC have been fulfilled (for further details, see information brochure of the European Patent Office "National Law relating to the EPC" and additional information in the Official Journal of the European Patent Office).

Pursuant to Article 158(1) EPC the publication under Article 21 PCT of an international application for which the European Patent Office is a designated Office takes the place of the publication of a European patent application.

The bibliographic data of the above-mentioned Euro-PCT application will be published on 20.03.02 in Section I.1 of the European Patent Bulletin.
The European publication number is 1188318.

In all future communications to the European Patent Office, please quote the application number plus Directorate number.

RECEIVING SECTION

CLAIMS:

1. A method comprising:

receiving a digital video file of captured video; and

encoding the file into a streaming video file at less than full screen frame size and at substantially the same real video frame rate that was used for capturing the video.

2. The method of claim 1, wherein the file is encoded at substantially the same frame size as that used for capturing the video.

3. The method of claim 2, wherein the file is encoded at a frame size of at least 320 x 240 pixels.

4. The method of claim 1, wherein the real video frame rate is at least 24 frames per second.

5. The method of claim 4, wherein the full screen frame size is at least 640 x 480 pixels.

6. The method of claim 1 further comprising uploading the streaming video file to a network server.

7. The method of claim 1 further comprising associating a viewing frame size code segment with the streaming video file.

8. The method of claim 7, wherein the code segment is in a hypertext markup language.

9. The method of claim 7, wherein the code segment causes the video to stream upon actuation of a user input device.

10. The method of claim 9, wherein the user actuation includes selection of a hypertext link on a web page, the hypertext link being associated with the streaming video file.

11. The method of claim 6 further comprising, in response to a user request received via an Internet web page, launching a video player at a user computer and then streaming the uploaded file over the Internet.

12. The method of claim 11 further comprising expanding the viewing frame size of a display screen to a full screen.

13. An article of manufacture comprising:

a machine-readable medium having instructions stored therein which, when executed by a processor, cause a system to receive a digital video file of captured video, and encode the file into a streaming video file at less than full screen frame size and at substantially the same real video frame rate that was used for capturing the video.

14. The article of manufacture of claim 13, wherein the instructions are such that the file is encoded at substantially the same frame size as that used for capturing the video.

15. The article of manufacture of claim 14, wherein the instructions are such that the file is encoded at a frame size of at least 320 x 240 pixels.

16. The article of manufacture of claim 13, wherein the instructions are such that the real video frame rate is at least 24 frames per second.

17. The article of manufacture of claim 16, wherein the instructions are such that the full screen frame size is at least 640 x 480 pixels.

18. The article of manufacture of claim 13, wherein the medium includes further instructions which cause the streaming video file to be uploaded to a network server.

19. The article of manufacture of claim 13, wherein the medium includes further instructions which cause a viewing frame size code segment to be associated with the streaming video file.

20. The article of manufacture of claim 19, wherein instructions are such that the code segment is in a hypertext markup language.

21. The article of manufacture of claim 19, wherein the instructions are such that the code segment causes the video to stream upon actuation of a user input device.

22. An apparatus comprising:

means for storing a digital video file of captured video; and

means for encoding the file into a streaming video file at less than full screen frame size and at substantially the same real video frame rate that was used for capturing the video.

23. The apparatus of claim 22, wherein the encoding means is to encode the file at substantially the same frame size as that used for capturing the video.

24. The apparatus of claim 23, wherein the encoding means is to encode the file at a frame size of at least 320 x 240 pixels.

25. The apparatus of claim 22, wherein the encoding means is to encode the file at a real video frame rate of at least 24 frames per second.

26. The apparatus of claim 25, wherein the encoding means is to encode the file at a frame size less than 640 x 480 pixels.

27. The apparatus of claim 22 further comprising means for uploading the streaming video file to a network server.

28. The apparatus of claim 22 further comprising means for controlling the playback and frame size of the streaming video file.

29. A computer program comprising computer program code means adapted to perform all the steps of claim 1 when that program is run on a computer.

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING OF A CHANGE

(PCT Rule 92bis.1 and Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

COESTER, Thomas, M.
Blakely, Sokoloff, Taylor & Zafman
7th Floor
12400 Wilshire Boulevard
Los Angeles, CA 90025
ETATS-UNIS D'AMERIQUE

EPO - DG 1
09. 01. 2002
(40)

Date of mailing (day/month/year) 27 December 2001 (27.12.01)	
Applicant's or agent's file reference 57103/112	**IMPORTANT NOTIFICATION**
International application No. PCT/US00/15405	**International filing date** (day/month/year) 02 June 2000 (02.06.00)

1. The following indications appeared on record concerning:

[ ] the applicant [ ] the inventor [X] the agent [ ] the common representative

Name and Address	State of Nationality	State of Residence
FOLEY & LARDNER 777 East Wisconsin Avenue 33rd Floor Milwaukee, WI 53202-5367 United States of America		
	Telephone No. 414 271-2400	
	Facsimile No. 414 297-4900	
	Teleprinter No.	

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

[X] the person [X] the name [X] the address [ ] the nationality [ ] the residence

Name and Address	State of Nationality	State of Residence
COESTER, Thomas, M. Blakely, Sokoloff, Taylor & Zafman 7th Floor 12400 Wilshire Boulevard Los Angeles, CA 90025 United States of America		
	Telephone No. 310 207 3800	
	Facsimile No. 310 820 5988	
	Teleprinter No.	

3. Further observations, if necessary:

4. A copy of this notification has been sent to:

[X] the receiving Office
[ ] the International Searching Authority
[ ] the International Preliminary Examining Authority
[ ] the designated Offices concerned
[X] the elected Offices concerned
[ ] other:

The International Bureau of WIPO **34, chemin des Colombettes** **1211 Geneva 20, Switzerland**	Authorized officer Marie-José DEVILLARD
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

An das Europäische Patentamt
*Nur für ab **1. Juli 1999** eingereichte internationale Anmeldungen!*

Eintritt in die europäische Phase vor dem (EPA als Bestimmungsamt oder ausgewähltes Amt)

To the European Patent Office
*Only for international applications filed from **1 July 1999** onwards!*

Entry into the European phase (EPO as designated or elected Office)

A l'office européen des brevets
*Seulement pour les demandes internationales déposées à compter du **1er juillet 1999**!*

Entrée dans la phase européenne (l'OEB agissant en qualité d'office désigné ou élu)

Europäische Anmeldenummer oder, falls nicht bekannt, PCT-Aktenzeichen oder PCT-Veröffentlichungsnummer	European application number, or, if not known, PCT application or publication number 00944619.6	Numéro de dépôt de la demande de brevet européen ou, à défaut numéro de dépôt PCT ou de publication PCT
Zeichen des Anmelders oder Vertreters (max. 15 Positionen)	Applicant's or representative's reference (max. 15 spaces) P/1739.EP/MWM	Référence du demandeur ou du mandataire (15 caractères ou espaces au maximum)

☒ **1. Anmelder**
Die Angaben über den (die) Anmelder sind in der internationalen Veröffentlichung enthalten oder vom Internationalen Büro nach der internationalen Veröffentlichung vermerkt werden.

1. Applicant
Indications concerning the applicant(s) are contained in the international publication or recorded by the International Bureau after the international publication.

1. Demandeur
Les indications concernant le(s) demandeur(s) figurent dans la publication internationale ou ont été enregistrées par le Bureau international après la publication internationale.

☐ Änderungen, die das Internationale Büro noch nicht vermerkt hat, sind auf einem Zusatzblatt angegeben.

Changes which have not yet been recorded by the International Bureau are set out on an additional sheet.

Les changements qui n'ont pas encore été enregistrés par le Bureau international sont indiqués sur une feuille additionnelle.

Zustellanschrift
(siehe Merkblatt II, 1)

Address for correspondence
(see Notes II, 1)

Adresse pour la correspondance
(voir notice II,1)

2. Vertreter

Name (Nur einen Vertreter angeben, der in das europäische Patentregister eingetragen und an den zugestellt wird)

Geschäftsanschrift

Telefon

Telefax **Telex**

2. Representative

Name (Name **only one** representative who is to be listed in the Register of European Patents and to whom notification is to be made)
MARTYN W MOLYNEAUX

Address of place of business
Wildman Harrold Allen & Dixon
11th Floor, Tower 3,
Clements Inn
London WC2A 2AZ

Telephone
+44 20 7831 0009

Fax **Telex**
+44 20 7831 9005

2. Mandataire

Nom (N'indiquer **qu' un seul** mandataire, qui sera inscrit au Registre européen des brevets et auquel signification sera faite)

Adresse professionnelle

Téléphone

Téléfax **Télex**

☐ Weitere(r) Vertreter auf Zusatzblatt

Additional representative(s) on additional sheet

Autre(s) mandataire(s) sur une feuille additionnelle

3. Vollmacht

☐ Einzelvollmacht ist beigefügt.

☐ Allgemeine Vollmacht ist registriert unter Nummer:

☐ Allgemeine Vollmacht ist eingereicht, aber noch nicht registriert.

☐ Die beim EPA als PCT-Anmeldeamt eingereichte Vollmacht schließt ausdrücklich die regionale Phase ein.

3. Authorisation

Individual authorisation is attached.

General authorisation has been registered under No:

A general authorisation has been filed, but not yet registered.

The authorisation filed with the EPO as PCT receiving Office expressly includes the regional phase.

3. Pouvoir

Un pouvoir spécial est joint.

Un pouvoir général a été enregistré sous le n°:

Un pouvoir général a été déposé, mais n'est pas encore enregistré.

Le pouvoir général déposé à l'OEB agissant en qualité d'office récepteur au titre du PCT s'applique expressément à la phase régionale.

☒ **4. Prüfungsantrag**
Hiermit wird die Prüfung der Anmeldung gemäß Art. 94 EPÜ beantragt. Die Prüfungsgebühr wird (wurde) entrichtet.

Prüfungsantrag in einer zugelassenen Nichtamtssprache (siehe Merkblatt III, 6.2):

4. Request for examination
Examination of the application under Art. 94 EPC is hereby requested. The examination fee is being (has been, will be) paid.

Request for examination in an admissible non-EPO language (see Notes III, 6.2):

4. Requête en examen
Il est demandé que soit examinée la demande de brevet, conformément à l'art. 94 CBE. Il est (a été, sera) procédé au paiement de la taxe d'examen.

Requête en examen dans une langue non officielle autorisée (voir notice III, 6.2):

☐ **5. Abschriften**
Zusätzliche Abschrift(en) der im ergänzenden europäischen Recherchenbericht angeführten Schriftstücke wird (werden) beantragt.

Anzahl der **zusätzlichen** Sätze von Abschriften

5. Copies
Additional copy (copies) of the documents cited in the supplementary European search report is (are) requested.

Number of **additional** sets of copies

5. Copies
Prière de fournir une ou plusieurs copie supplémentaire des documents cités dans le rapport complémentaire de recherche européenne.

Nombre de jeux **supplémentaires** de copies

6. Für das Verfahren vor dem EPA bestimmte Unterlagen

6.1 Dem Verfahren vor dem EPA als **Bestimmungsamt** (PCT I) sind folgende Unterlagen zugrunde zu legen:

☒ die vom Internationalen Büro **veröffentlichten Anmeldungsunterlagen** (mit **allen** Ansprüchen, Beschreibung und Zeichnungen), gegebenenfalls mit den geänderten Ansprüchen nach Art. 19 PCT

☐ soweit sie nicht ersetzt werden durch die **in drei Stücken** beigefügten **Änderungen.**

Falls nötig, sind Klarstellungen auf einem Zusatzblatt einzureichen !

6.2 Dem Verfahren vor dem EPA als **ausgewähltem Amt** (PCT II) sind folgende Unterlagen zugrunde zu legen:

☒ die dem **internationalen vorläufigen Prüfungsbericht zugrunde gelegten Unterlagen** einschließlich seiner eventuellen **Anlagen**
(Solche Anlagen müssen immer in drei Stücken beigefügt werden)

soweit sie nicht ersetzt werden durch die **in drei Stücken** beigefügten **Änderungen.**

Falls nötig, sind Klarstellungen auf einem Zusatzblatt einzureichen!

☒ Sind dem EPA als mit der internationalen vorläufigen Prüfung beauftragten Behörde **Versuchsberichte** zugegangen, dürfen diese dem Verfahren vor dem EPA zugrunde gelegt werden.

6. Documents intended for proceedings before the EPO

6.1 Proceedings before the EPO as **designated Office** (PCT I) are to be based on the following documents:

the **application documents published** by the International Bureau (with **all** claims, description and drawings), where applicable with amended claims under Art. 19 PCT

unless replaced by the **amendments** enclosed **in triplicate.**

Where necessary, clarifications must be submitted on a separate sheet!

6.2 Proceedings before the EPO as **elected Office** (PCT II) are to be based on the following documents:

the **documents on which the international preliminary examination report is based,** including its possible **annexes**
(Such annexes must always be filed in triplicate)

unless replaced by the **amendments** enclosed **in triplicate.**

Where necessary, clarifications must be submitted on a separate sheet!

If the EPO as International Preliminary Examining Authority has received **test reports**, these may be used as the basis of proceedings before the EPO.

6. Pièces destinées à la procédure devant l'OEB

6.1 La procédure devant l'OEB agissant en qualité **d'office désigné** (PCT I) doit se fonder sur les pièces suivantes:

les **pièces de la demande publiée** par le Bureau international (avec **toutes** les revendications, la description et les dessins), éventuellement avec les revendications modifiées conformément à l'article 19 du PCT

dans la mesure où elles ne sont pas remplacées par les **modifications** jointes **en trois exemplaires.**

Le cas échéant, des explications doivent être jointes sur une feuille additionnelle!

6.2 La procédure devant l'OEB **agissant en qualité d'office élu** (PCT II) doit se fonder sur les pièces suivantes :

les **pièces sur lesquelles se fonde le rapport d'examen préliminaire international**, y compris ses **annexes** éventuelles
(De telles annexes sont toujours à joindre en trois exemplaires)

dans la mesure où elles ne sont pas remplacées par les **modifications** jointes **en trois exemplaires.**

Le cas échéant, des explications doivent être jointes sur une feuille additionnelle!

Si l'OEB, agissant en qualité d'administration chargée de l'examen préliminaire international, a reçu des **rapports d'essais**, ceux-ci peuvent constituer la base de la procédure devant l'OEB.

7. Übersetzungen
Beigefügt sind die nachfolgend angekreuzten Übersetzungen in einer der Amtssprachen des EPA (Deutsch, Englisch, Französisch):

- *Im Verfahren vor dem EPA als* ***Bestimmungsamt oder ausgewähltem Amt*** *(PCT I+II):*

☐ Übersetzung der **ursprünglich eingereichten internationalen Anmeldung** (Beschreibung, Ansprüche, etwaige Textbestandteile in den Zeichnungen), der veröffentlichten Zusammenfassung, und etwaiger Angaben über biologisches Material nach Regel 13bis.3 und 13bis.4 PCT, **in drei Stücken**

☐ Übersetzung der **prioritätsbegründenden Anmeldung(en), in einem Stück**

☐ Es wird hiermit erklärt, daß die internationale Anmeldung in ihrer ursprünglich eingereichten Fassung eine vollständige Übersetzung der früheren Anmeldung ist (Regel 38(5) EPÜ)

- ***Zusätzlich*** *im Verfahren vor dem EPA als* ***Bestimmungsamt*** *(PCT I):*

☐ Übersetzung der nach Art. 19 PCT **geänderten Ansprüche** nebst Erklärung, falls diese dem Verfahren vor dem EPA zugrunde gelegt werden sollen (siehe Feld 6), **in drei Stücken**

- ***Zusätzlich*** *im Verfahren vor dem EPA als* ***ausgewähltem Amt*** *(PCT II):*

☐ Übersetzung der **Anlagen zum internationalen vorläufigen Prüfungsbericht, in drei Stücken**

7. Translations
Translations in one of the official languages of the EPO (English, French, German) are enclosed as crossed below:

- *In proceedings before the EPO as* ***designated or elected Office*** *(PCT I + II):*

Translation of the **international application** (description, claims, any text in the drawings) **as originally filed**, of the abstract as published and of any indication under Rule 13bis.3 and 13bis.4 PCT regarding biological material, **in triplicate**

Translation of **the priority application(s), in one copy**

It is hereby declared that the international application as originally filed is a complete translation of the previous application (Rule 38(5) EPC)

- ***In addition,*** *in proceedings before the EPO as* ***designated Office*** *(PCT I):*

Translation of **amended claims** and any statement under Art. 19 PCT, if the claims as amended are to form the basis for the proceedings before the EPO (see Section 6), **in triplicate**

- ***In addition,*** *in proceedings before the EPO as* ***elected office*** *(PCT II):*

Translation of any **annexes to the international preliminary examination report, in triplicate**

7. Traductions
Vous trouverez ci-jointes les traductions cochées ci-après dans l'une des langues officielles de l'OEB (allemand, anglais, français):

- *Dans la procédure devant l'OEB agissant en qualité* ***d'office désigné ou élu*** *(PCT I + II):*

Traduction de la **demande internationale telle que déposée initialement** (description, revendications, textes figurant éventuellement dans les dessins), de l'abrégé publié, et de toutes indications visées aux règles 13bis.3 et 13bis.4 du PCT concernant le matériel biologique, **en trois exemplaires**

Traduction de la (des) **demande(s) ouvrant le droit de priorité, en un exemplaire**

Il est déclaré par la présente que la demande internationale telle que déposée initialement est une traduction intégrale de la demande antérieure (règle 38(5) CBE)

- ***De plus,*** *dans la procédure devant l'OEB agissant en qualité* ***d'office désigné*** *(PCT I):*

Traduction des **revendications modifiées** et de la déclaration faite conformément à l'article 19 du PCT, si la procédure devant l'OEB doit être fondée sur les revendications modifiées (voir la rubrique 6), **en trois exemplaires**

- ***De plus,*** *dans la procédure devant l'OEB agissant en qualité* ***d'office élu*** *(PCT II):*

Traduction des **annexes du rapport d'examen préliminaire international, en trois exemplaires**

8. Biologisches Material
☐ Die Erfindung bezieht sich auf bzw. verwendet biologisches Material, das nach Regel 28 EPÜ hinterlegt worden ist.

☐ Die **Angaben nach Regel 28(1)c) EPÜ** (falls noch nicht bekannt, die Hinterlegungsstelle und das (die) Bezugszeichen [Nummer, Symbole usw.] des Hinterlegers) sind in der internationalen Veröffentlichung oder in der gemäß Feld 7 eingereichten Übersetzung enthalten auf:

Seite(n) / Zeile(n)

Die **Empfangsbescheinigung(en)** der Hinterlegungsstelle

☐ ist (sind) beigefügt

☐ wird (werden) nachgereicht

☐ Verzicht auf die Verpflichtung des Antragstellers nach Regel 28(3) auf gesondertem Schriftstück

8. Biological material
The invention relates to and/or uses biological material deposited under Rule 28 EPC.

The **particulars referred to in Rule 28(1)(c) EPC** (if not yet known, the depository institution and the identification refernces(s) [number, symbols, etc.] of the depositor) are given in the international publication or in the translation submitted under Section 7 on:

page(s) / line(s)

The **receipt(s) of deposit** issued by the depositary institution

is (are) enclosed

will be filed at a later date

Waiver of the right to an undertaking from the requester pursuant to Rule 28(3) attached.

8. Matière biologique
L'invention concerne et/ou utilise la matière biologique, déposée conformément à la règle 28 CBE.

Les **indications visées à la règle 28(1)c) CBE** (si pas encore connues, l'autoritée de dépôt et la (les) référence(s) d'identification [numéro ou symboles etc.] du déposant) figurent dans la publication internationale ou dans une traduction produite conformément à la rubrique 7 à la / aux:

page(s) / ligne(s)

Le(s) **récépissé(s) de dépôt** délivré(s) par l'autorité de dépôt

est (sont) joint(s)

sera (seront) produit(s) ultérieurement

Renonciation, sur document distinct, à l'engagement du requérant au titre de la règle 28(3).

9. Nucleotid- und Aminosäure-sequenzen

☐ Die nach Regeln 5.2 und 13ter PCT sowie Regel 111(3) EPÜ erforderli-chen Unterlagen liegen dem EPA bereits vor.

☐ Das schriftliche Sequenzprotokoll wird anliegend in einer Amtssprache des EPA nachgereicht.

☐ Das Sequenzprotokoll geht nicht über den Inhalt der Anmeldung in der ursprünglich eingereichten Fassung hinaus.

☐ Der vorgeschriebene maschinenles-bare Datenträger ist beigefügt.

☐ Die auf dem Datenträger gespei-cherte Information stimmt mit dem schriftlichen Sequenzprotokoll überein.

9. Nucleotide and amino acid sequences

The items necessary in accordance with Rules 5.2 and 13ter PCT and Rule 111(3) EPC have already been furnished to the EPO.

The written sequence listing is furnished herewith in an official language of the EPO.

The sequence listing does not include matter which goes beyond the content of the application as filed.

The prescribed machine-readable data carrier is enclosed.

The information recorded on the data carrier is identical to the written sequence listing.

9. Séquences de nucléotides et d'acides aminés

Les pièces requises selon les règles 5.2 et 13ter PCT et la règle 111(3) CBE ont déjà été déposées auprès de l'OEB.

La liste de séquences écrite est produite ci-joint dans une des langues officielles de l'OEB.

La liste de séquences ne contient pas d'éléments s'étendant au-delà du contenu de la demande telle qu'elle a été déposée.

Le support de données prescrit, déchiffrable par machine, est annexé.

L'information figurant sur le support de données est identique à celle que contient la liste de séquences écrite.

10. Benennungsgebühren *

☒ 10.1 Es ist derzeit beabsichtigt, den **sie-benfachen** Betrag einer Benennungs-gebühr zu entrichten. Damit gelten die Benennungsgebühren für **alle Vertragsstaaten des EPÜ**[1] als ent-richtet (Art. 2 Nr. 3 GebO), soweit sie **in der internationalen Anmeldung** bestimmt sind.

☐ 10.2 Abweichend von der Erklärung in Nr. 10.1 ist derzeit beabsichtigt, **weniger als sieben** Benennungsgebühren für folgende **in der internationalen Anmeldung bestimmte Vertrags-staaten des EPÜ**[2] zu entrichten:

(1) ☐ _____

(2) ☐ _____

(3) ☐ _____

Soweit unter Nr. 10.2 Vertragstaaten aufgeführt sind, wird beantragt , für die dort nicht angeführten Vertragsstaaten von der Zustellung von Mitteilungen nach Regel 85a(1) und Regel 69(1) EPÜ abzusehen.

☒ 10.3 Wird ein **automatischer Abbuchungsauftrag** erteilt (Feld 12), so wird das EPA beauftragt, bei Ab-lauf der Grundfrist nach Regel 107 (1)d) EPÜ den siebenfachen Betrag einer Benennungsgebühr abzubuchen. Ist eine Erklärung nach Nr. 10.2 abgegeben worden, so sollen die Benennungsgebühren nur für die dort angegebenen Vertragsstaaten abgebucht werden, sofern dem EPA nicht bis zum Ablauf der Grundfrist ein anderslautender Auftrag zugeht.

* Form **1200 (03.00)** nur verwenden für internationale Anmeldungen, die ab **1. Juli 1999** eingereicht worden sind; andernfalls bitte Form **1200 (04.99)** verwenden.

10. Designation fees *

10.1 It is currently intended to pay **seven times** the amount of the designation fee. The designation fees for **all the EPC contracting states**[1] **designated in the international application** are thereby deemed to have been paid (Art. 2 No. 3 RFees).

10.2 The declaration in No. 10.1 does not apply. Instead, it is currently intended to pay **fewer the seven** designation fees for the following **EPC contracting states**[2] **designated in the international application:**

(4) ☐ _____

(5) ☐ _____

(6) ☐ _____

If contracting states are indicated under No. 10.2, it is requested that no communications under Rules 85a(1) or 69(1) EPC be issued for contracting states not thus indicated.

10.3 If an **automatic debit order** has been issued (Section 12), the EPO is authorised, on expiry of the basic period under Rule 107(1)(d) EPC, to debit seven times the amount of the designation fee. If states are indicated under No. 10.2, the EPO will debit designation fees only for those states, unless instructed otherwise before the basic period expires.

* Use Form **1200 (03.00)** only for international applications filed from **1 July 1999** onwards; otherwise please use Form **1200 (04.99)**.

10. Taxes de désignation *

10.1 Il est actuellement envisagé de payer un montant correspondant à **sept fois** la taxe de désignation. Les taxes de désignation sont ainsi réputées payées pour **tous les Etats contractants de la CBE**[1] **désignés dans la demande internationale** (art. 2, point 3 du RRT).

10.2 Contrairement à ce qui est indiqué au n° 10.1, il est actuellement envisagé de payer **moins de sept** taxes de désignation pour les **Etats contractants de la CBE**[2] suivants **désignés dans la demande internationale:**

Si des états contractants sont mentionnés au n°. 10.2, prière de ne pas procéder à la signification des notifications prévues par les règles 85bis(1) et 69(1) CBE pour les Etats contractants n'y ayant pas été mentionnés.

10.3 Si un **ordre de prélèvement auto-matique** est donné (rubrique 12), il est demandé à l'OEB de prélever , à l'expiration du délai normal visé à la règle 107(1)d) CBE, un montant correspondant à sept fois la taxe de désignation. Si une déclaration a été faite au n° 10.2, les taxes de désigna-tion ne sont à prélever que pour les Etats contractants qui y sont indi-qués, sauf instruction contraire reçue par l'OEB avant l'expiration du délai normal.

* Veuillez utiliser le formulaire **1200 (03.00)** seulement pour les demandes internationales déposées à compter du **1er juillet 1999.** Sinon, utilisez le formulaire **1200 (04.99)**.

1 Stand bei Drucklegung: 19 Vertragsstaaten, und zwar: / Status when this form was printed: 19 contracting states, namely / Situation à la date d'impression : 19 Etats contractants, à savoir: **AT** Österreich / Austria / Autriche, **BE** Belgien / Belgium / Belgique, **CH/LI** Schweiz und Liechtenstein / Switzerland and Liechtenstein / Suisse et Liechtenstein, **CY** Zypern / Cyprus / Chypre, **DE** Deutschland / Germany / Allemagne, **DK** Dänemark / Denmark / Danemark, **ES** Spanien / Spain / Espagne, **FI** Finnland / Finland / Finlande, **FR** Frankreich / France / France, **GB** Vereinigtes Königreich / United Kingdom / Royaume-Uni, **GR** Griechenland / Greece / Grèce, **IE** Irland / Ireland / Irlande, **IT** Italien / Italy / Italie, **LU** Luxemburg / Luxembourg / Luxembourg, **MC** Monaco / Monaco / Monaco, **NL** Niederlande / Netherlands / Pays-Bas, **PT** Portugal / Portugal / Portugal, **SE** Schweden / Sweden / Suède

2 Für Zypern nur möglich, falls in der internationalen Anmeldung am oder nach dem 1. April 1998 bestimmt. / For Cyprus possible only if designated in the international application on or after 1 April 1998. / En ce qui concerne Chypre, seulement si la désignation a été effectuée dans la demande internationale le 1er avril 1998 ou à une date ultérieure.

☒ **11. Erstreckung des europäischen Patents**
Diese Anmeldung gilt auch als Erstreckungsantrag für alle in der **internationalen** Anmeldung bestimmten **Nicht-Vertragsstaaten** des EPÜ, mit denen bei Einreichung der internationalen Anmeldung »Erstreckungsabkommen« in Kraft waren. Die Erstrekkung wird jedoch nur wirksam, wenn die vorgeschriebene Erstreckungsgebühr entrichtet wird. Es wird derzeit beabsichtigt, die Erstreckungsgebühr für die nachfolgend angekreuzten Staaten zu entrichten:

11. Extension of the European patent
This application is also considered as being a request for extension to all the **non-Contracting States** to the EPC designated in the **international** application with which "extension agreements" were in force on the date of filing the international application. However, the extension only takes effect if the prescribed extension fee is paid. It is currently intended to pay the extension fee for the States marked with a cross below:

11. Extension des effets du brevet européen
La présente demande est également réputée demande d'extension à tous les **Etats non contractants** de la CBE désignés dans la demande **internationale,** avec lesquels existaient, lors du dépôt de la demande, des «accords d'extension». Toutefois l'extension ne produit ses effets que si la taxe d'extension prescrite est acquittée. Il est actuellement envisagé de payer la taxe d'extension pour les Etats dont le nom est coché ci-après:

☐	SI	Slowenien	Slovenia	Slovénie
☐	LT	Litauen	Lithuania	Lituanie
☐	LV	Lettland	Latvia	Lettonie
☐	AL	Albanien	Albania	Albanie
☐	RO	Rumänien	Romania	Roumanie
☐	MK	Ehemalige jugoslawische Republik Mazedonien	Former Yugoslav Republic of Macedonia	Ex-République yougoslave de Macédoine
☐		1)	1)	1)

1) Platz für Staaten, mit denen »Erstreckungsabkommen« nach Drucklegung dieses Formblatts in Kraft treten und die in der internationalen Anmeldung bestimmt waren.

1) Space for States with which "extension agreements" enter into force after this form has been printed and which were designated in the international application.

1) Prévu pour des Etats à l'égard desquels des «accords d'extension» entreront en vigueur après l'impression du présent formulaire et qui ont été désignés dans la demande internationale.

☐ **12. Automatischer Abbuchungsauftrag** ***(Nur möglich für Inhaber von beim EPA geführten laufenden Konten)***

Das EPA wird beauftragt, nach Maßgabe der Vorschriften über das automatische Abbuchungsverfahren fällige Gebühren und Auslagen vom untenstehenden laufenden Konto abzubuchen. Im Bezug auf **die Benennungsgebühren** wird auf Feld 10.3 verwiesen. Das EPA wird ferner beauftragt, die **Erstreckungsgebühren** für jeden in Feld 11 angekreuzten »Erstreckungsstaat« bei Ablauf der Grundfrist zu ihrer Zahlung abzubuchen, sofern ihm nicht bis dahin ein anderslautender Auftrag zugeht.

Nummer und Kontoinhaber

12. Automatic debit order ***(for EPO deposit account holders only)***

The EPO is hereby authorised, under the Arrangements for the automatic debiting procedure, to debit from the deposit account below any fees and costs falling due. **For designation fees,** see Section 10.3. The EPO is also authorised, on expiry of the basic period for paying the **extension fees,** to debit those fees for each of the "extension states" marked with a cross in Section 11, unless instructed otherwise before the said period expires.

Number and account holder

12. Ordre de prélèvement automatique ***(uniquement possible pour les titulaires de comptes courants ouverts auprès de l'OEB)***

Par la présente, il est demandé à l'OEB de prélever du compte courant ci-dessous les taxes et frais venant à échéance, conformément à la réglementation relative au prélèvement automatique. Pour **les taxes de désignation**, se reporter à la rubrique 10.3. Il est en outre demandé à l'OEB de prélever, à l'expiration du délai normal prévu pour leur paiement, les **taxes d'extension** pour chaque « Etat autorisant l'extension» coché à la rubrique 11, sauf instruction contraire reçue avant l'expiration de ce délai.

Numéro et titulaire du compte

☐ **13.** Eventuelle **Rückzahlungen** auf das beim EPA geführte laufende Konto
Nummer und Kontoinhaber

13. Any **reimbursement** to EPO deposit account
Number and account holder

2805 0319 Wildman Harrold

13. Remboursements éventuels à effectuer sur le compte courant ouvert auprès de l'OEB
Numéro et titulaire du compte

14. Unterschrift(en) des (der) Anmelder(s) oder Vertreter

14. Signature(s) of applicant(s) or representative

MARTYN W MOLYNEAUX

14. Signature(s) du (des) demandeur(s) ou du mandataire

Ort / Datum
Für Angestellte (Art. 133(3) EPÜ) mit allgemeiner Vollmacht:
Nr.

Name(n) des (der) Unterzeichneten bitte in Druckschrift wiederholen. Bei juristischen Personen bitte auch die Stellung des (der) Unterzeichneten innerhalb der Gesellschaft in Druckschrift angeben.

Place / Date London, England /13.12.01
For employees (Art. 133(3) EPC) having a general authorisation:
No.

Please print name(s) under signature(s). In the case of legal persons, the position of the signatory within the company should also be printed.

Lieu / Date
Pour les employés (art. 133(3) CBE) disposant d'un pouvoir général:
N°

Le ou les noms des signataires doivent être indiqués en caractères d'imprimerie. S'il s'agit d'une personne morale, la position occupée au sein de celle-ci par le ou les signataires doit également être indiquée en caractères d'imprimerie.

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FACSIMILE CONFIRMATION

December 13, 2001

The European Patent Office
D-80298 Munich
GERMANY

Dear Sirs

RE: European Patent Application derived
from PCT/US00/15405
IVIEWIT HOLDINGS, INC
European Patent Application No. 00944619.6
Our Ref: P/1739.EP/MWM

The above referenced PCT application is entering the European regional phase.

The applicant wishes to designate the following member states, namely:

AUSTRIA	BELGIUM
CYPRUS	DENMARK
SWITZERLAND	GERMANY
FINLAND	SPAIN
FRANCE	UNITED KINGDOM
GREECE	IRELAND
ITALY	LUXEMBOURG
MONACO	NETHERLANDS
PORTUGAL	TURKEY
SWEDEN.	

Zur Kasse

We enclose the following:

1) Form 1200;

2) Set of claims, in triplicate, upon which prosecution is to be effected.

We request Substantive Examination of this application.

We also enclose a debit order form in respect of fees. If there is any discrepancy in the fees paid herewith, we request our Deposit Account 2805 0319 be debited/credited.

Please address all correspondence relating to this application to Martyn W Molyneaux at our letterhead address.

Please acknowledge safe receipt of this letter by returning a copy of the attached form 1037.

Yours faithfully
WILDMAN HARROLD
ALLEN & DIXON

MARTYN W MOLYNEAUX
(Professional Representative of
the Applicant)

MWM/kj

CLAIMS

1. A method of providing a streaming video file, comprising:

providing digital video data having a capture frame size of at least 69,300 pixels per frame; and

converting the digital video data to a streaming video file having a converted frame size of at least 69,300 pixels per frame.

2. The method of claim 1, wherein the capture frame size has an aspect ratio of 4:3 and the converted frame size of has an aspect ratio of 4:3.

3. The method of claim 2, wherein the capture frame size is at least 304 x 228 pixels and the converted frame size is at least 304 x 228 pixels.

4. The method of claim 3, wherein the capture frame size is approximately 320 x 240 pixels and the converted frame size is approximately 320 x 240 pixels.

5. The method of claim 1, wherein the step of providing includes capturing a video signal.

6. The method of claim 5, wherein the step of providing includes digitizing the video signal to generate the digital video data.

Amended claims

7. The method of claim 6, wherein the step of providing includes storing the captured video data as a data file in a storage device, and wherein the step of converting includes retrieving the stored data file from the storage device.

8. The method of claim 1, wherein the step of providing includes retrieving the digital video data from a storage device.

9. The method of claim 1, further comprising compressing the digital video data.

10. The method of claim 9, wherein the digital video data is compressed to an MPEG file format.

11. The method of claim 1, wherein the streaming video file is converted to an RM format or an ASF format.

12. The method of claim 1, wherein the converted frame size is approximately 320 x 240 pixels.

13. The method of claim 1, wherein the digital video data has a capture frame rate of at least 24 frames per second and the streaming video file has a converted frame rate of at least 24 frames per second.

14. The method of claim 1, further comprising streaming the streaming video file across a network.

15. The method of claim 14, wherein the network is the Internet.

Amended claims

16. A method of providing a streaming video file, comprising:

providing digital video data having a capture frame rate of at least 24 frames per second; and

converting the digital video data to a streaming video file having a converted frame rate of at least 24 frames per second.

17. The method of claim 16, wherein the capture frame rate is between 29 and 30 frames per second and the converted frame rate is between 29 and 30 frames per second.

18. The method of claim 16, wherein the step of providing includes capturing a video signal.

19. The method of claim 17, wherein the step of providing includes digitizing the video signal to generate the digital video data.

20. The method of claim 18, wherein the step of providing includes storing the captured video data as a data file in a storage device, and wherein the step of converting includes retrieving the stored data file from the storage device.

21. The method of claim 16, wherein the step of providing includes retrieving the digital video data from a storage device.

22. The method of claim 16, further comprising compressing the digital video data.

23. The method of claim 21, wherein the digital video data is compressed to an MPEG file format.

Amended claims

24. The method of claim 16, wherein the streaming video file is converted to an RM format or an ASF format.

25. The method of claim 16, wherein the digital video data has a capture frame size of at least 69,300 pixels per frame and the streaming video file has a converted frame size of at least 69,300 pixels per frame.

26. The method of claim 25, wherein the capture frame size has an aspect ratio of 4:3 and the converted frame size has an aspect ratio of 4:3.

27. The method of claim 26, wherein the capture frame size is at least 302 x 228 pixels and the converted frame size is at least 302 x 228 pixels.

28. The method of claim 27, wherein the capture frame size is approximately 320 x 240 and the converted frame size is approximately 320 x 240 pixels.

29. The method of claim 16, further comprising streaming the streaming video file across a network.

30. The method of claim 29, wherein the network is the Internet.

Amended claims

31. A method of providing a streaming video file, comprising:

obtaining a source video signal having a predetermined source video parameter;

capturing the source video signal while maintaining substantially the same source video parameter to provide a captured digital video file; and

encoding the captured digital video file while maintaining substantially the same source video parameter to provide a streaming video file.

32. The method of claim 31, wherein the source video parameter includes the frame rate.

33. The method of claim 32, wherein the source video frame rate is at least 24 frames per second.

34. The method of claim 32, wherein the source video frame rate is a real video frame rate.

35. The method of claim 31, wherein the source video parameter includes the number of scanned lines of video per frame.

36. The method of claim 35, wherein the number of scanned lines of video per frame is at least 240.

37. The method of claim 31, wherein the streaming video file has a capture frame size of at least 304 x 228 pixels.

38. The method of claim 37, wherein the streaming video file has a capture frame size is approximately 320 x 240 pixels.

Amended claims

39. The method of claim 31, further comprising editing the captured digital video file using video editing software.

40. The method of claim 31, wherein the step of encoding includes compressing the captured digital video file.

41. The method of claim 31, wherein the captured digital video file is in an MPEG file format.

42. The method of claim 31, wherein the source video signal is provided from a video playback device.

43. A method of generating a streaming video file for streaming over the Internet, comprising:

providing digital video data having a capture frame size of at least 320 x 240 pixels;

compressing the digital video data;

encoding the digital video data into a streaming video file, wherein the streaming video file has a frame size of at least 320 x 240 pixels; and

uploading the streaming video file to an Internet server.

44. The method of claim 43, wherein the streaming video file has a real video frame rate.

45. The method of claim 44, further comprising associating a hypertext link with the streaming video file.

46. The method of claim 45, further comprising running a video player program on an Internet client computer.

47. The method of claim 46, further comprising configuring the video player program for full-screen streaming video.

Amended claims

48. A system for providing a streaming video file, comprising:

means for providing digital video data having a capture frame size of at least 320 x 240 pixels; and

means for converting the digital video data to a streaming video file having a converted frame size of at least 320 x 240 pixels.

49. The system of claim 48, wherein the digital video data has a capture frame rate of at least 24 frames per second and the streaming video file has a converted frame rate of at least 24 frames per second.

50. The system of claim 48, further comprising means for capturing a video signal.

51. The system of claim 48, wherein the means for converting includes means for encoding the digital video file into an RM file format.

Amended claims

52. A system for providing a streaming video file, comprising:

means for providing digital video data having a capture frame rate of at least 24 frames per second; and

means for converting the digital video data to a streaming video file having a converted frame rate of at least 24 frames per second.

53. The system of claim 52, wherein the capture frame size is at least 302 x 228 pixels and the converted frame size is at least 302 x 228 pixels.

54. The system of claim 52, further comprising means for capturing a video signal.

55. The system of claim 52, wherein the means for converting includes means for encoding the digital video data into an RM file format.

Amended claims

16

1

An das Europäische Patentamt
Nur für ab 1. Juli 1999 eingereichte internationale Anmeldungen!

Eintritt in die europäische Phase vor dem (EPA als Bestimmungsamt oder ausgewähltes Amt)

To the European Patent Office
Only for international applications filed from 1 July 1999 onwards!

Entry into the European phase (EPO as designated or elected Office)

A l'office européen des brevets
Seulement pour les demandes internationales déposées à compter du 1er juillet 1999!

Entrée dans la phase européenne (l'OEB agissant en qualité d'office désigné ou élu)

Deutsch	English	Français
Europäische Anmeldenummer oder, falls nicht bekannt, PCT-Aktenzeichen oder PCT-Veröffentlichungsnummer	European application number, or, if not known, PCT application or publication number 00944619.6	Numéro de dépôt de la demande de brevet européen ou, à défaut numéro de dépôt PCT ou de publication PCT
Zeichen des Anmelders oder Vertreters (max. 15 Positionen)	Applicant's or representative's reference (max. 15 spaces) P/1739.EP/MWM	Référence du demandeur ou du mandataire (15 caractères ou espaces au maximum)
☒ **1. Anmelder** Die Angaben über den (die) Anmelder sind in der internationalen Veröffentlichung enthalten oder vom Internationalen Büro nach der internationalen Veröffentlichung vermerkt werden.	**1. Applicant** Indications concerning the applicant(s) are contained in the international publication or recorded by the International Bureau after the international publication.	**1. Demandeur** Les indications concernant le(s) demandeur(s) figurent dans la publication internationale ou ont été enregistrées par le Bureau International après la publication internationale.
☐ Änderungen, die das Internationale Büro noch nicht vermerkt hat, sind auf einem Zusatzblatt angegeben.	Changes which have not yet been recorded by the International Bureau are set out on an additional sheet.	Les changements qui n'ont pas encore été enregistrés par le Bureau international sont indiqués sur une feuille additionnelle.
Zustellanschrift *(siehe Merkblatt II, 1)*	**Address for correspondence** *(see Notes II, 1)*	**Adresse pour la correspondance** *(voir notice II,1)*
2. Vertreter **Name (Nur einen** Vertreter angeben, der in das europäische Patentregister eingetragen und an den zugestellt wird)	**2. Representative** **Name** (Name **only one** representative who is to be listed in the Register of European Patents and to whom notification is to be made) MARTYN W MOLYNEAUX	**2. Mandataire** **Nom** (N'indiquer qu' un seul mandataire, qui sera inscrit au Registre européen des brevets et auquel signification sera faite)
Geschäftsanschrift	**Address of place of business** Wildman Harrold Allen & Dixon 11th Floor, Tower 3, Clements Inn London WC2A 2AZ	**Adresse professionnelle**
Telefon	**Telephone** +44 20 7831 0009	**Téléphone**
Telefax **Telex**	**Fax** **Telex** +44 20 7831 9005	**Téléfax** **Télex**
☐ Weitere(r) Vertreter auf Zusatzblatt	Additional representative(s) on additional sheet	Autre(s) mandataire(s) sur une feuille additionnelle
3. Vollmacht	**3. Authorisation**	**3. Pouvoir**
☐ Einzelvollmacht ist beigefügt.	Individual authorisation is attached.	Un pouvoir spécial est joint.
☐ Allgemeine Vollmacht ist registriert unter Nummer:	General authorisation has been registered under No:	Un pouvoir général a été enregistré sous le n°:
☐ Allgemeine Vollmacht ist eingereicht, aber noch nicht registriert.	A general authorisation has been filed, but not yet registered.	Un pouvoir général a été déposé, mais n'est pas encore enregistré.
☐ Die beim EPA als PCT-Anmeldeamt eingereichte Vollmacht schließt ausdrücklich die regionale Phase ein.	The authorisation filed with the EPO as PCT receiving Office expressly includes the regional phase.	Le pouvoir général déposé à l'OEB agissant en qualité d'office récepteur au titre du PCT s'applique expressément à la phase régionale.

Zur Kasse
A € 3175,-

EPA/EPO/OEB Form 1200.1 03.00 webdot

Empfangszeit 13.Dez. 17:20

☒	**4. Prüfungsantrag** Hiermit wird die Prüfung der Anmeldung gemäß Art. 94 EPÜ beantragt. Die Prüfungsgebühr wird (wurde) entrichtet. *Prüfungsantrag in einer zugelassenen Nichtamtssprache (siehe Merkblatt III, 6.2):*	**4. Request for examination** Examination of the application under Art. 94 EPC is hereby requested. The examination fee is being (has been, will be) paid. *Request for examination in an admissible non-EPO language (see Notes III, 6.2):*	**4. Requête en examen** Il est demandé que soit examinée la demande de brevet, conformément à l'art. 94 CBE. Il est (a été, sera) procédé au paiement de la taxe d'examen. *Requête en examen dans une langue non officielle autorisée (voir notice III, 6.2):*
☐	**5. Abschriften** Zusätzliche Abschrift(en) der im ergänzenden europäischen Recherchenbericht angeführten Schriftstücke wird (werden) beantragt. Anzahl der **zusätzlichen** Sätze von Abschriften	**5. Copies** Additional copy (copies) of the documents cited in the supplementary European search report is (are) requested. Number of **additional** sets of copies	**5. Copies** Prière de fournir une ou plusieurs copie supplémentaire des documents cités dans le rapport complémentaire de recherche européenne. Nombre de jeux **supplémentaires** de copies
	6. Für das Verfahren vor dem EPA bestimmte Unterlagen	**6. Documents intended for proceedings before the EPO**	**6. Pièces destinées à la procédure devant l'OEB**
	6.1 Dem Verfahren vor dem EPA als **Bestimmungsamt** (PCT I) sind folgende Unterlagen zugrunde zu legen:	6.1 Proceedings before the EPO as **designated Office** (PCT I) are to be based on the following documents:	6.1 La procédure devant l'OEB agissant en qualité **d'office désigné** (PCT I) doit se fonder sur les pièces suivantes:
☒	die vom Internationalen Büro **veröffentlichten Anmeldungsunterlagen** (mit allen Ansprüchen, Beschreibung und Zeichnungen), gegebenenfalls mit den geänderten Ansprüchen nach Art. 19 PCT	the **application documents published** by the International Bureau (with all claims, description and drawings), where applicable with amended claims under Art. 19 PCT	les **pièces de la demande publiée** par le Bureau international (avec **toutes** les revendications, la description et les dessins), éventuellement avec les revendications modifiées conformément à l'article 19 du PCT
☐	soweit sie nicht ersetzt werden durch die **in drei Stücken** beigefügten **Änderungen.**	unless replaced by the **amendments** enclosed **in triplicate.**	dans la mesure où elles ne sont pas remplacées par les **modifications** jointes **en trois exemplaires.**
	Falls nötig, sind Klarstellungen auf einem Zusatzblatt einzureichen !	*Where necessary, clarifications must be submitted on a separate sheet!*	*Le cas échéant, des explications doivent être jointes sur une feuille additionnelle!*
	6.2 Dem Verfahren vor dem EPA als **ausgewähltem Amt** (PCT II) sind folgende Unterlagen zugrunde zu legen:	6.2 Proceedings before the EPO as **elected Office** (PCT II) are to be based on the following documents:	6.2 La procédure devant l'OEB **agissant en qualité d'office élu** (PCT II) doit se fonder sur les pièces suivantes :
☒	die dem **internationalen vorläufigen Prüfungsbericht zugrunde gelegten Unterlagen** einschließlich seiner eventuellen **Anlagen** *(Solche Anlagen müssen immer in drei Stücken beigefügt werden)*	the **documents on which the international preliminary examination report is based,** including its possible **annexes** *(Such annexes must always be filed in triplicate)*	les **pièces sur lesquelles se fonde le rapport d'examen préliminaire international,** y compris ses **annexes** éventuelles *(De telles annexes sont toujours à joindre en trois exemplaires)*
	soweit sie nicht ersetzt werden durch die **in drei Stücken** beigefügten **Änderungen.**	unless replaced by the **amendments** enclosed **in triplicate.**	dans la mesure où elles ne sont pas remplacées par les **modifications** jointes **en trois exemplaires.**
	Falls nötig, sind Klarstellungen auf einem Zusatzblatt einzureichen!	*Where necessary, clarifications must be submitted on a separate sheet!*	*Le cas échéant, des explications doivent être jointes sur une feuille additionnelle!*
☒	Sind dem EPA als mit der internationalen vorläufigen Prüfung beauftragten Behörde **Versuchsberichte** zugegangen, dürfen diese dem Verfahren vor dem EPA zugrunde gelegt werden.	If the EPO as International Preliminary Examining Authority has received **test reports,** these may be used as the basis of proceedings before the EPO.	Si l'OEB, agissant en qualité d'administration chargée de l'examen préliminaire international, a reçu des **rapports d'essais,** ceux-ci peuvent constituer la base de la procédure devant l'OEB.

7. Übersetzungen Beigefügt sind die nachfolgend angekreuzten Übersetzungen in einer der Amtssprachen des EPA (Deutsch, Englisch, Französisch):	**7. Translations** Translations in one of the official languages of the EPO (English, French, German) are enclosed as crossed below:	**7. Traductions** Vous trouverez ci-jointes les traductions cochées ci-après dans l'une des langues officielles de l'OEB (allemand, anglais, français):
• *Im Verfahren vor dem EPA als **Bestimmungsamt oder ausgewähltem Amt** (PCT I+II):*	• *In proceedings before the EPO **as designated or elected Office** (PCT I + II):*	• *Dans la procédure devant l'OEB agissant en qualité d'office **désigné ou élu** (PCT I + II):*
☐ Übersetzung der **ursprünglich eingereichten internationalen Anmeldung** (Beschreibung, Ansprüche, etwaige Textbestandteile in den Zeichnungen), der veröffentlichten Zusammenfassung, und etwaiger Angaben über biologisches Material nach Regel 13bis.3 und 13bis.4 PCT, **in drei Stücken**	Translation of the **international application** (description, claims, any text in the drawings) **as originally filed**, of the abstract as published and of any indication under Rule 13bis.3 and 13bis.4 PCT regarding biological material, **in triplicate**	Traduction de la **demande internationale telle que déposée initialement** (description, revendications, textes figurant éventuellement dans les dessins), de l'abrégé publié, et de toutes indications visées aux règles 13bis.3 et 13bis.4 du PCT concernant le matériel biologique, **en trois exemplaires**
☐ Übersetzung der **prioritätsbegründenden Anmeldung(en), in einem Stück**	Translation of **the priority application(s), in one copy**	Traduction de la (des) **demande(s) ouvrant le droit de priorité, en un exemplaire**
☐ Es wird hiermit erklärt, daß die internationale Anmeldung in ihrer ursprünglich eingereichten Fassung eine vollständige Übersetzung der früheren Anmeldung ist (Regel 38(5) EPÜ)	It is hereby declared that the international application as originally filed is a complete translation of the previous application (Rule 38(5) EPC)	Il est déclaré par la présente que la demande internationale telle que déposée initialement est une traduction intégrale de la demande antérieure (règle 38(5) CBE)
• ***Zusätzlich** im Verfahren vor dem EPA als **Bestimmungsamt** (PCT I):*	• ***In addition,** in proceedings before the EPO as **designated Office** (PCT I):*	• ***De plus,** dans la procédure devant l'OEB agissant en qualité **d'office désigné** (PCT I):*
☐ Übersetzung der nach Art. 19 PCT **geänderten Ansprüche** nebst Erklärung, falls diese dem Verfahren vor dem EPA zugrunde gelegt werden sollen (siehe Feld 6), **in drei Stücken**	Translation of **amended claims** and any statement under Art. 19 PCT, if the claims as amended are to form the basis for the proceedings before the EPO (see Section 6), **in triplicate**	Traduction des **revendications modifiées** et de la déclaration faite conformément à l'article 19 du PCT, si la procédure devant l'OEB doit être fondée sur les revendications modifiées (voir la rubrique 6), **en trois exemplaires**
• ***Zusätzlich** im Verfahren vor dem EPA als **ausgewähltem Amt** (PCT II):*	• ***In addition,** in proceedings before the EPO as **elected office** (PCT II):*	• ***De plus,** dans la procédure devant l'OEB agissant en qualité **d'office élu** (PCT II):*
☐ Übersetzung der **Anlagen zum internationalen vorläufigen Prüfungsbericht, in drei Stücken**	Translation of any **annexes to the international preliminary examination report, in triplicate**	Traduction des **annexes du rapport d'examen préliminaire international, en trois exemplaires**
8. Biologisches Material ☐ Die Erfindung bezieht sich auf bzw. verwendet biologisches Material, das nach Regel 28 EPÜ hinterlegt worden ist.	**8. Biological material** The invention relates to and/or uses biological material deposited under Rule 28 EPC.	**8. Matière biologique** L'invention concerne et/ou utilise la matière biologique, déposée conformément à la règle 28 CBE.
☐ **Die Angaben nach Regel 28(1)c) EPÜ** (falls noch nicht bekannt, die Hinterlegungsstelle und das (die) Bezugszeichen [Nummer, Symbole usw.] des Hinterlegers) sind in der internationalen Veröffentlichung oder in der gemäß Feld 7 eingereichten Übersetzung enthalten auf:	**The particulars referred to in Rule 28(1)(c) EPC** (if not yet known, the depository institution and the identification reference(s) [number, symbols, etc.] of the depositor) are given in the international publication or in the translation submitted under Section 7 on:	**Les indications visées à la règle 28(1)c) CBE** (si pas encore connues, l'autorité de dépôt et la (les) référence(s) d'identification [numéro ou symboles etc.] du déposant) figurent dans la publication internationale ou dans une traduction produite conformément à la rubrique 7 à la / aux:
Seite(n) / Zeile(n)	page(s) / line(s)	page(s) / ligne(s)
Die Empfangsbescheinigung(en) der Hinterlegungsstelle	**The receipt(s) of deposit** issued by the depositary institution	**Le(s) récépissé(s) de dépôt** délivré(s) par l'autorité de dépôt
☐ ist (sind) beigefügt	is (are) enclosed	est (sont) joint(s)
☐ wird (werden) nachgereicht	will be filed at a later date	sera (seront) produit(s) ultérieurement
☐ Verzicht auf die Verpflichtung des Antragstellers nach Regel 28(3) auf gesondertem Schriftstück	Waiver of the right to an undertaking from the requester pursuant to Rule 28(3) attached.	Renonciation, sur document distinct, à l'engagement du requérant au titre de la règle 28(3).

9. Nucleotid- und Aminosäuro-sequenzen	9. Nucleotide and amino acid sequences	9. Séquences de nucléotides et d'acides aminés
☐ Die nach Regeln 5.2 und 13ter PCT sowie Regel 111(3) EPÜ erforderli-chen Unterlagen liegen dem EPA bereits vor.	The items necessary in accordance with Rules 5.2 and 13ter PCT and Rule 111(3) EPC have already been furnished to the EPO.	Les pièces requises selon les règles 5.2 et 13ter PCT et la règle 111(3) CBE ont déjà été déposées auprès de l'OEB.
☐ Das schriftliche Sequenzprotokoll wird anliegend in einer Amtssprache des EPA nachgereicht.	The written sequence listing is furnished herewith in an official language of the EPO.	La liste de séquences écrite est produite ci-joint dans une des langues officielles de l'OEB.
☐ Das Sequenzprotokoll geht nicht über den Inhalt der Anmeldung in der ursprünglich eingereichten Fassung hinaus.	The sequence listing does not include matter which goes beyond the content of the application as filed.	La liste de séquences ne contient pas d'éléments s'étendant au-delà du contenu de la demande telle qu'elle a été déposée.
☐ Der vorgeschriebene maschinenles-bare Datenträger ist beigefügt.	The prescribed machine-readable data carrier is enclosed.	Le support de données prescrit, déchiffrable par machine, est annexé.
☐ Die auf dem Datenträger gespei-cherte Information stimmt mit dem schriftlichen Sequenzprotokoll überein.	The information recorded on the data carrier is identical to the written sequence listing.	L'information figurant sur le support de données est identique à celle que contient la liste de séquences écrite.

10. Benennungsgebühren *	10. Designation fees *	10. Taxes de désignation *
☒ 10.1 Es ist derzeit beabsichtigt, den **sie-benfachen** Betrag einer Benennungs-gebühr zu entrichten. Damit gelten die Benennungsgebühren für alle **Vertragsstaaten des EPÜ**[1] als entrichtet (Art. 2 Nr. 3 GebO), sowait sie **in der internationalen Anmeldung** bestimmt sind.	10.1 It is currently intended to pay **seven times** the amount of the designation fee. The designation fees for **all the EPC contracting states**[1] **designated in the international application** are thereby deemed to have been paid (Art. 2 No. 3 RFees).	10.1 Il est actuellement envisagé de payer un montant correspondant à **sept fois** la taxe de désignation. Les taxes de désignation sont ainsi réputées payées pour **tous les Etats contractants de la CBE**[1] **désignés dans la demande internationale** (art. 2, point 3 du RRT).
☐ 10.2 Abweichend von der Erklärung in Nr. 10.1 ist derzeit beabsichtigt, **weniger als sieben** Benennungsgebühren für folgende **in der internationalen An-meldung bestimmte Vertrags-staaten des EPÜ**[2] zu entrichten:	10.2 The declaration in No. 10.1 does not apply. Instead, it is currently intended to pay **fewer the seven** designation fees for the following **EPC contracting states**[2] **designated in the international application:**	10.2 Contrairement à ce qui est indiqué au n° 10.1, il est actuellement envisagé de payer **moins de sept** taxes de désignation pour les **Etats contractants de la CBE**[2] suivants **désignés dans la demande internationale:**
(1) ☐ _____ (2) ☐ _____ (3) ☐ _____		(4) ☐ _____ (5) ☐ _____ (6) ☐ _____
Soweit unter Nr. 10.2 Vertragstaaten aufgeführt sind, wird beantragt , für die dort nicht angeführten Vertragsstaaten von der Zustellung von Mitteilungen nach Regel 85a(1) und Regel 69(1) EPÜ abzusehen.	If contracting states are indicated under No. 10.2, it is requested that no communications under Rules 85a(1) or 69(1) EPC be issued for contracting states not thus indicated.	Si des états contractants sont mentionnés au n°. 10.2, prière de ne pas procéder à la signification des notifications prévues par les règles 85bis(1) et 69(1) CBE pour les Etats contractants n'y ayant pas été mentionnés.
☒ 10.3 Wird ein **automatischer Abbuchungsauftrag** erteilt (Feld 12), so wird das EPA beauftragt, bei Ab-lauf der Grundfrist nach Regel 107 (1)d) EPÜ den siebenfachen Betrag einer Benennungsgebühr abzubuchen. Ist eine Erklärung nach Nr. 10.2 abgegeben worden, so sollen die Benennungsgebühren nur für die dort angegebenen Vertragsstaaten abgebucht werden, sofern dem EPA nicht bis zum Ablauf der Grundfrist ein anderslautender Auftrag zugeht.	10.3 If an **automatic debit order** has been issued (Section 12), the EPO is authorised, on expiry of the basic period under Rule 107(1)(d) EPC, to debit seven times the amount of the designation fee. If states are indicated under No. 10.2, the EPO will debit designation fees only for those states, unless instructed otherwise before the basic period expires.	10.3 Si un **ordre de prélèvement automatique** est donné (rubrique 12), il est demandé à l'OEB de prélever , à l'expiration du délai normal visé à la règle 107(1)d) CBE, un montant correspondant à sept fois la taxe de désignation. Si une déclaration a été faite au n° 10.2, les taxes de désignation ne sont à prélever que pour les Etats contractants qui y sont indiqués, sauf instruction contraire reçue par l'OEB avant l'expiration du délai normal.
* Form 1200 (03.00) nur verwenden für internationale Anmeldungen, die ab 1. Juli 1998 eingereicht worden sind; andernfalls bitte Form 1200 (04.99) verwenden.	* Use Form 1200 (03.00) only for international applications filed from 1 July 1999 onwards; otherwise please use Form 1200 (04.99).	* Veuillez utiliser le formulaire 1200 (03.00) seulement pour les demandes internationales déposées à compter du 1er juillet 1999. Sinon, utilisez le formulaire 1200 (04.99).

1 Stand bei Drucklegung: 19 Vertragsstaaten, und zwar: / Status when this form was printed: 19 contracting states, namely / Situation à la date d'impression : 19 Etats contractants, à savoir: AT Österreich / Austria / Autriche, BE Belgien / Belgium / Belgique, CH/LI Schweiz und Liechtenstein / Switzerland and Liechtenstein / Suisse et Liechtenstein, CY Zypern / Cyprus / Chypre, DE Deutschland / Germany / Allemagne, DK Dänemark / Denmark / Danemark, ES Spanien / Spain / Espagne, FI Finnland / Finland / Finlande, FR Frankreich / France / France, GB Vereinigtes Königreich / United Kingdom / Royaume-Uni, GR Griechenland / Greece / Grèce, IE Irland / Ireland / Irlande, IT Italien / Italy / Italie, LU Luxemburg / Luxembourg / Luxembourg, MC Monaco / Monaco / Monaco, NL Niederlande / Netherlands / Pays-Bas, PT Portugal / Portugal / Portugal, SE Schweden / Sweden / Suède

2 Für Zypern nur möglich, falls in der internationalen Anmeldung am oder nach dem 1. April 1998 bestimmt. / For Cyprus possible only if designated in the international application on or after 1 April 1998. / En ce qui concerne Chypre, seulement si la désignation a été effectuée dans la demande internationale le 1er avril 1998 ou à une date ultérieure.

☒ **11. Erstreckung des europäischen Patents**
Diese Anmeldung gilt auch als Erstreckungsantrag für alle in der internationalen Anmeldung bestimmten **Nicht-Vertragsstaaten** des EPO, mit denen bei Einreichung der internationalen Anmeldung »Erstreckungsabkommen« in Kraft waren. Die Erstreckung wird jedoch nur wirksam, wenn die vorgeschriebene Erstreckungsgebühr entrichtet wird. Es wird derzeit beabsichtigt, die Erstreckungsgebühr für die nachfolgend angekreuzten Staaten zu entrichten:

11. Extension of the European patent
This application is also considered as being a request for extension to all the **non-Contracting States** to the EPC designated in the international application with which "extension agreements" were in force on the date of filing the international application. However, the extension only takes effect if the prescribed extension fee is paid. It is currently intended to pay the extension fee for the States marked with a cross below:

11. Extension des effets du brevet européen
La présente demande est également réputée demande d'extension à tous les **Etats non contractants** de la CBE désignés dans la demande internationale, avec lesquels existaient, lors du dépôt de la demande, des «accords d'extension». Toutefois l'extension ne produit ses effets que si la taxe d'extension prescrite est acquittée.
Il est actuellement envisagé de payer la taxe d'extension pour les Etats dont le nom est coché ci-après:

☐	SI	Slowenien	Slovenia	Slovénie
☐	LT	Litauen	Lithuania	Lituanie
☐	LV	Lettland	Latvia	Lettonie
☐	AL	Albanien	Albania	Albanie
☐	RO	Rumänien	Romania	Roumanie
☐	MK	Ehemalige jugoslawische Republik Mazedonien	Former Yugoslav Republic of Macedonia	Ex-République yougoslave de Macédoine
☐		1)	1)	1)

1) Platz für Staaten, mit denen »Erstreckungsabkommen« nach Drucklegung dieses Formblatts in Kraft treten und die in der internationalen Anmeldung bestimmt waren.

1) Space for States with which "extension agreements" enter into force after this form has been printed and which were designated in the international application.

1) Prévu pour des Etats à l'égard desquels des «accords d'extension» entreront en vigueur après l'impression du présent formulaire et qui ont été désignés dans la demande internationale.

12. Automatischer Abbuchungsauftrag ***(Nur möglich für Inhaber von beim EPA geführten laufenden Konten)***

☐ Das EPA wird beauftragt, nach Maßgabe der Vorschriften über das automatische Abbuchungsverfahren fällige Gebühren und Auslagen vom untenstehenden laufenden Konto abzubuchen. Im Bezug auf die **Benennungsgebühren** wird auf Feld 10.3 verwiesen. Das EPA wird ferner beauftragt, die **Erstreckungsgebühren** für jeden in Feld 11 angekreuzten »Erstreckungsstaat« bei Ablauf der Grundfrist zu ihrer Zahlung abzubuchen, sofern ihm nicht bis dahin ein anderslautender Auftrag zugeht.

Nummer und Kontoinhaber

12. Automatic debit order ***(for EPO deposit account holders only)***

The EPO is hereby authorised, under the Arrangements for the automatic debiting procedure, to debit from the deposit account below any fees and costs falling due. For **designation fees**, see Section 10.3. The EPO is also authorised, on expiry of the basic period for paying the **extension fees**, to debit those fees for each of the "extension states" marked with a cross in Section 11, unless instructed otherwise before the said period expires.

Number and account holder

12. Ordre de prélèvement automatique ***(uniquement possible pour les titulaires de comptes courants ouverts auprès de l'OEB)***

Par la présente, il est demandé à l'OEB de prélever du compte courant ci-dessous les taxes et frais venant à échéance, conformément à la réglementation relative au prélèvement automatique. Pour **les taxes de désignation**, se reporter à la rubrique 10.3. Il est en outre demandé à l'OEB de prélever, à l'expiration du délai normal prévu pour leur paiement, les **taxes d'extension** pour chaque « Etat autorisant l'extension» coché à la rubrique 11, sauf instruction contraire reçue avant l'expiration de ce délai.

Numéro et titulaire du compte

☐ **13. Eventuelle Rückzahlungen** auf das beim EPA geführte laufende Konto
Nummer und Kontoinhaber

13. Any reimbursement to EPO deposit account
Number and account holder

2805 0319 Wildman Harrold

13. Remboursements éventuels à effectuer sur le compte courant ouvert auprès de l'OEB
Numéro et titulaire du compte

14. Unterschrift(en) des (der) Anmelder(s) oder Vertreters

14. Signature(s) of applicant(s) or representative

MARTYN W MOLYNEAUX

14. Signature(s) du (des) demandeur(s) ou du mandataire

Ort / Datum
Für Angestellte (Art. 133(3) EPÜ) mit allgemeiner Vollmacht:
Nr.

Name(n) des (der) Unterzeichneten bitte in Druckschrift wiederholen. Bei juristischen Personen bitte auch die Stellung des (der) Unterzeichneten innerhalb der Gesellschaft in Druckschrift angeben.

Place / Date London, England /13.12.01
For employees (Art. 133(3) EPC) having a general authorisation:
No.

Please print name(s) under signature(s). In the case of legal persons, the position of the signatory within the company should also be printed.

Lieu / Date
Pour les employés (art. 133(3) CBE) disposant d'un pouvoir général:
N°

Le ou les noms des signataires doivent être indiqués en caractères d'imprimerie. S'il s'agit d'une personne morale, la position occupée au sein de celle-ci par le ou les signataires doit également être indiquée en caractères d'imprimerie.

CLAIMS

1. A method of providing a streaming video file, comprising:

providing digital video data having a capture frame size of at least 69,300 pixels per frame; and

converting the digital video data to a streaming video file having a converted frame size of at least 69,300 pixels per frame.

2. The method of claim 1, wherein the capture frame size has an aspect ratio of 4:3 and the converted frame size of has an aspect ratio of 4:3.

3. The method of claim 2, wherein the capture frame size is at least 304 x 228 pixels and the converted frame size is at least 304 x 228 pixels.

4. The method of claim 3, wherein the capture frame size is approximately 320 x 240 pixels and the converted frame size is approximately 320 x 240 pixels.

5. The method of claim 1, wherein the step of providing includes capturing a video signal.

6. The method of claim 5, wherein the step of providing includes digitizing the video signal to generate the digital video data.

7. The method of claim 6, wherein the step of providing includes storing the captured video data as a data file in a storage device, and wherein the step of converting includes retrieving the stored data file from the storage device.

8. The method of claim 1, wherein the step of providing includes retrieving the digital video data from a storage device.

9. The method of claim 1, further comprising compressing the digital video data.

10. The method of claim 9, wherein the digital video data is compressed to an MPEG file format.

11. The method of claim 1, wherein the streaming video file is converted to an RM format or an ASF format.

12. The method of claim 1, wherein the converted frame size is approximately 320 x 240 pixels.

13. The method of claim 1, wherein the digital video data has a capture frame rate of at least 24 frames per second and the streaming video file has a converted frame rate of at least 24 frames per second.

14. The method of claim 1, further comprising streaming the streaming video file across a network.

15. The method of claim 14, wherein the network is the Internet.

16. A method of providing a streaming video file, comprising:

providing digital video data having a capture frame rate of at least 24 frames per second; and

converting the digital video data to a streaming video file having a converted frame rate of at least 24 frames per second.

17. The method of claim 16, wherein the capture frame rate is between 29 and 30 frames per second and the converted frame rate is between 29 and 30 frames per second.

18. The method of claim 16, wherein the step of providing includes capturing a video signal.

19. The method of claim 17, wherein the step of providing includes digitizing the video signal to generate the digital video data.

20. The method of claim 18, wherein the step of providing includes storing the captured video data as a data file in a storage device, and wherein the step of converting includes retrieving the stored data file from the storage device.

21. The method of claim 16, wherein the step of providing includes retrieving the digital video data from a storage device.

22. The method of claim 16, further comprising compressing the digital video data.

23. The method of claim 21, wherein the digital video data is compressed to an MPEG file format.

24. The method of claim 16, wherein the streaming video file is converted to an RM format or an ASF format.

25. The method of claim 16, wherein the digital video data has a capture frame size of at least 69,300 pixels per frame and the streaming video file has a converted frame size of at least 69,300 pixels per frame.

26. The method of claim 25, wherein the capture frame size has an aspect ratio of 4:3 and the converted frame size has an aspect ratio of 4:3.

27. The method of claim 26, wherein the capture frame size is at least 302 x 228 pixels and the converted frame size is at least 302 x 228 pixels.

28. The method of claim 27, wherein the capture frame size is approximately 320 x 240 and the converted frame size is approximately 320 x 240 pixels.

29. The method of claim 16, further comprising streaming the streaming video file across a network.

30. The method of claim 29, wherein the network is the Internet.

31. A method of providing a streaming video file, comprising:

obtaining a source video signal having a predetermined source video parameter;

capturing the source video signal while maintaining substantially the same source video parameter to provide a captured digital video file; and

encoding the captured digital video file while maintaining substantially the same source video parameter to provide a streaming video file.

32. The method of claim 31, wherein the source video parameter includes the frame rate.

33. The method of claim 32, wherein the source video frame rate is at least 24 frames per second.

34. The method of claim 32, wherein the source video frame rate is a real video frame rate.

35. The method of claim 31, wherein the source video parameter includes the number of scanned lines of video per frame.

36. The method of claim 35, wherein the number of scanned lines of video per frame is at least 240.

37. The method of claim 31, wherein the streaming video file has a capture frame size of at least 304 x 228 pixels.

38. The method of claim 37, wherein the streaming video file has a capture frame size is approximately 320 x 240 pixels.

39. The method of claim 31, further comprising editing the captured digital video file using video editing software.

40. The method of claim 31, wherein the step of encoding includes compressing the captured digital video file.

41. The method of claim 31, wherein the captured digital video file is in an MPEG file format.

42. The method of claim 31, wherein the source video signal is provided from a video playback device.

43. A method of generating a streaming video file for streaming over the Internet, comprising:

providing digital video data having a capture frame size of at least 320 x 240 pixels;

compressing the digital video data;

encoding the digital video data into a streaming video file, wherein the streaming video file has a frame size of at least 320 x 240 pixels; and

uploading the streaming video file to an Internet server.

44. The method of claim 43, wherein the streaming video file has a real video frame rate.

45. The method of claim 44, further comprising associating a hypertext link with the streaming video file.

46. The method of claim 45, further comprising running a video player program on an Internet client computer.

47. The method of claim 46, further comprising configuring the video player program for full-screen streaming video.

48. A system for providing a streaming video file, comprising:

means for providing digital video data having a capture frame size of at least 320 x 240 pixels; and

means for converting the digital video data to a streaming video file having a converted frame size of at least 320 x 240 pixels.

49. The system of claim 48, wherein the digital video data has a capture frame rate of at least 24 frames per second and the streaming video file has a converted frame rate of at least 24 frames per second.

50. The system of claim 48, further comprising means for capturing a video signal.

51. The system of claim 48, wherein the means for converting includes means for encoding the digital video file into an RM file format.

52. A system for providing a streaming video file, comprising:

means for providing digital video data having a capture frame rate of at least 24 frames per second; and

means for converting the digital video data to a streaming video file having a converted frame rate of at least 24 frames per second.

53. The system of claim 52, wherein the capture frame size is at least 302 x 228 pixels and the converted frame size is at least 302 x 228 pixels.

54. The system of claim 52, further comprising means for capturing a video signal.

55. The system of claim 52, wherein the means for converting includes means for encoding the digital video data into an RM file format.

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BY FACSIMILE

December 13, 2001

The European Patent Office
D-80298 Munich
GERMANY

Dear Sirs

RE: European Patent Application derived
from PCT/US00/15405
MEWIT HOLDINGS, INC
European Patent Application No. 00944619.6
Our Ref: P/1739.EP/MWM

The above referenced PCT application is entering the European regional phase.

The applicant wishes to designate the following member states, namely:

AUSTRIA	BELGIUM
CYPRUS	DENMARK
SWITZERLAND	GERMANY
FINLAND	SPAIN
FRANCE	UNITED KINGDOM
GREECE	IRELAND
ITALY	LUXEMBOURG
MONACO	NETHERLANDS
PORTUGAL	TURKEY
SWEDEN.	

We enclose the following:

1) Form 1200;

2) Set of claims, in triplicate, upon which prosecution is to be effected.

We request Substantive Examination of this application.

We also enclose a debit order form in respect of fees. If there is any discrepancy in the fees paid herewith, we request our Deposit Account 2805 0319 be debited/credited.

Please address all correspondence relating to this application to Martyn W Molyneaux at our letterhead address.

Please acknowledge safe receipt of this letter by returning a copy of the attached form 1037.

Yours faithfully
WILDMAN HARROLD
ALLEN & DIXON

MARTYN W MOLYNEAUX
(Professional Representative of the Applicant)

MWM/kj

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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
57103/112		
International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US00/15405	02/06/2000	03/06/1999
International Patent Classification (IPC) or national classification and IPC H04N7/173		
Applicant IVIEWIT HOLDINGS, INC. et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

   ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

   These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

   - I ☒ Basis of the report
   - II ☐ Priority
   - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
   - IV ☐ Lack of unity of invention
   - V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations suporting such statement
   - VI ☐ Certain documents cited
   - VII ☒ Certain defects in the international application
   - VIII ☒ Certain observations on the international application

Date of submission of the demand	Date of completion of this report
29/12/2000	28.09.2001
Name and mailing address of the international preliminary examining authority: European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized officer Giannotti, P Telephone No. +31 70 340 2706

Form PCT/IPEA/409 (cover sheet) (January 1994)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US00/15405

I. Basis of the report

1. With regard to the **elements** of the international application *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17))*:
Description, pages:

1-23 as originally filed

Claims, No.:

1-55 as originally filed

Drawings, sheets:

1/3-3/3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

   (Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	
	No:	Claims	1-55
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-55
Industrial applicability (IA)	Yes:	Claims	1-55
	No:	Claims	

2. Citations and explanations
   see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:
see separate sheet

in relation to Point V

The present application does not satisfy the criterion set forth in Article 33(2) PCT because the subject-matter of Claims 1-55 is not new.

The following document is mentioned in this report:

D1 JOSÉ ALVEAR:
"Web Developer.com Guide to Streaming Multimedia "
9 April 1998 (1998-04-09) , JOHN WILEY & SONS , NEW YORK

The present application presents four independent claims in the category 'method'(Claims 1, 16, 31, 43), and two independent claims in the category 'system' (Claims 48 and 52).

With regard to all of the independent Claims 1, 16, 31, 43, 48, and 52, document D1 is considered to be the most relevant piece of prior art.

Document D1 offers explanations about several techniques to provide streaming video, illustrating a broad variety of embodiments. In particular, it is well known from D1 that video streaming entails: providing a source video signal having a predetermined source video parameter; compressing, encoding and converting the source video signal to a streaming digital video file; uploading the streaming digital video file to a network server; playing the streaming digital video file on the computer of the receiving user (see for example in D1, chapter 4 dedicated to the digital video basic elements, and chapter 11 dedicated to streaming video with the RealVideo technology; for compression before streaming, see page 71).

In particular, D1 explains that full-screen video is also foreseen (see D1, page 185, lines 1-3, or page 196, lines 27-30, or page 191, lines 3-10), together with streaming at a range of possible resolutions (for the 320x240 and 640x480 resolution, 30fps, see page 76 or page 70).

Consequently, document D1 discloses (referring to D1, cited passages, but using the

terms of Claim 1):

"1. A method of providing a streaming video file, comprising: providing digital video data having a capture frame size of at least 69,300 pixels per frame; and converting the digital video data to a streaming video file having a converted frame size of at least 69,300 pixels per frame. "

All of the features defined in Claim 1 are known from the cited document D1. Therefore this claim does not fulfill the requirements of Article 33(2) PCT.

The subject matter of the Claims 2-15, directed to embodiments characterised by specific frame sizes or by specific arrangements, does not present any new feature, for the features defined in these claims are known from the cited document D1 (see document D1, cited passages). Therefore these claims do not meet the requirements of Article 33(2) PCT.

The same conclusions are valid for independent Claims 16, 31, and 43. All of the methods defined in these claims are known from the cited document D1 (see document D1, cited passages). Therefore these claims do not fulfill the requirements of Article 33(2) PCT.

The subject matter of the Claims 16-30, 32-42, and 44-47 does not present any new feature, for the features defined in this claim are known from the cited document D1 (see document D1, cited passages). Therefore also these claims do not meet the requirements of Article 33(2) PCT.

As for the claims directed to a system, Claims 48 and 52, they respectively correspond to Claim 43 and 16. The subject matter of Claims 48 and 52, and of the Claims 49-51 and 53-55 depending thereupon, is all known from document D1 (see document D1, cited passages). Therefore these claims do not fulfill the requirements of Article 33(2) PCT.

in relation to Point VII

The independent claims do not fulfill the requirements of Rule 6.3 (b) PCT, because the independent claims are not properly cast in the two part form, with those features which in combination are part of the prior art (see document D1) being placed in the preambles.

The independent claims do not fulfill the requirements of Rule 6.2 (b) PCT., because the reference signs in parentheses are not inserted in the claims to increase their intelligibility. This applies to all of the claims.

in relation to Point VIII

Claim 1, Claim 16, Claim 31 and Claim 43 are all directed to a method, and they overlap at a large extent. As a consequence, their formulation is such that there are doubts in respect of the matter for which protection is sought and which falls under the terms of the claims. The same is valid also for Claims 48 and 52, which are the independent claims directed to a system. Because of said overlap, Claims 1, 16, 31, and 43 on one side and Claims 48 and 52 on the other -taken as a whole- are not clear, contrary to Article 6 PCT.

Moreover, there is a doubt in respect of the features which are to be considered essential for the solution of the problem to which the present application relates. The present independent claims refer to a specific frame size or frame rate, but do not define the matter for which protection is sought by referring to the features necessary to achieve the object of the present application. Therefore, due to a lack of essential features, the matter for which protection is sought is not clearly defined, contrary to Article 6 PCT.

3

P1 282563

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

August 07, 2000

THIS IS TO CERTIFY THAT ANNEXED HERETO IS A TRUE COPY FROM THE RECORDS OF THE UNITED STATES PATENT AND TRADEMARK OFFICE OF THOSE PAPERS OF THE BELOW IDENTIFIED PATENT APPLICATION THAT MET THE REQUIREMENTS TO BE GRANTED A FILING DATE UNDER 35 USC 111.

APPLICATION NUMBER: ***60/155,404***
FILING DATE: ***September 22, 1999***
PCT APPLICATION NUMBER: *PCT/US00/15405*

By Authority of the
COMMISSIONER OF PATENTS AND TRADEMARKS

L. Edelen

L. EDELEN
Certifying Officer

PRIORITY DOCUMENT

SUBMITTED OR TRANSMITTED IN
COMPLIANCE WITH RULE 17.1(a) OR (b)

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JC520 U.S. PTO 09/22/99

JC583 U.S. PTO 60/155404 09/22/99

PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53 (c).

INVENTOR(S)

Given Name (first and middle [if any])	Family Name or Surname	Residence (City and either State or Foreign Country)
Eliot I.	BERNSTEIN	500 S.E. Mizner Blvd. Suite 102 Boca Raton, FL 33432-6080

☐ Additional inventors are being named on the ___ separately numbered sheets attached hereto

TITLE OF THE INVENTION (280 characters max)

APPARATUS AND METHOD FOR PRODUCING ENHANCED VIDEO IMAGES AND/OR VIDEO FILES

CORRESPONDENCE ADDRESS

Direct all correspondence to:

☐ Customer Number [ ] → Place Customer Number Bar Code Label here

Type Customer Number here

OR

[X] Firm or Individual Name	Raymond A. Joao, Esq.
Address	Meltzer, Lippe, Goldstein & Schlissel, P.C.
Address	190 Willis Avenue
City	Mineola — State: NY — ZIP: 11501
Country	USA — Telephone: 516-747-0300 — Fax: 516-747-9363

ENCLOSED APPLICATION PARTS (check all that apply)

[X] Specification Number of Pages: 29

[X] Drawing(s) Number of Sheets: 4

[X] Small Entity Statement

[X] Other (specify): Power of Attorney

METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT (check one)

[X] A check or money order is enclosed to cover the filing fees.

☐ The Commissioner is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number:

FILING FEE AMOUNT ($): 75.00

The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.

[X] No.

☐ Yes, the name of the U.S. Government agency and the Government contract number are: ___

Respectfully submitted,

SIGNATURE [signature]

Date 9/22/99

TYPED or PRINTED NAME Raymond A. Joao, Esq.

REGISTRATION NO. (if appropriate) 35,907

TELEPHONE 516-747-0300, xtn-240

Docket Number: 5865-7

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

Attorney Docket No.: 5865-7

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	:	**Eliot I. Bernstein**
Serial No.	:	**Please assign**
Filed	:	**Concurrently herewith**
Title	:	**APPARATUS AND METHOD FOR PRODUCING ENHANCED VIDEO IMAGES AND/OR VIDEO FILES**

Box Provisional Application
Assistant Commissioner for Patents
Washington, D.C. 20231

"Express Mail" mailing label number EL355808546US

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated below and is addressed to: Box Provisional Application, Assistant Commissioner for Patents, Washington, D.C. 20231

Date of Deposit: September 22, 1999

(Signature): Nicole Eliseo-Pinou

Nicole Eliseo-Pinou

PROVISIONAL PATENT APPLICATION TRANSMITTAL LETTER

Sir:

Please find transmitted herewith for filing the following:

(1) Provisional Application for Patent Cover Sheet;

(2) Provisional Patent Application including Specification, Claims and Abstract - 29 pages, and Drawings - 4 sheets.

(3) Verified Statement Claiming Small Entity Status;

(4) Check in the amount of $75.00 for the filing fee;

(5) Power of Attorney form; and

(6) Return Receipt Postcard.

It is respectfully requested that the above papers be filed as a Provisional Patent Application.

Respectfully submitted,
MELTZER, LIPPE, GOLDSTEIN
& SCHLISSEL, P.C.

By: ____________________
Raymond A. Joao
Reg. No. 35,907

September 22, 1999

MELTZER, LIPPE, GOLDSTEIN
& SCHLISSEL, P.C.
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Mineola, New York 11501

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FROM :

VERIFIED STATEMENT CLAIMING SMALL ENTITY STATUS
(37 CFR 1.9(f) & 1.27(b))--INDEPENDENT INVENTOR

Attorney Docket No.: 5865-7

Applicant or Patentee: Eliot I. Bernstein

Serial or Patent No.: Please assign

Filed or Issued: Concurrently herewith

Title: APPARATUS AND METHOD FOR PRODUCING ENHANCED VIDEO IMAGES AND/OR VIDEO FILES

As a below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9(c) for purposes of paying reduced fees to the Patent and Trademark Office described in:

X the specification filed herewith with title as listed above.
__ the application identified above.
__ the patent identified above.

I have not assigned, granted, conveyed or licensed and am under no obligation under contract or law to assign, grant, convey or license, any rights in the invention to any person who would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention as listed below:

X No such person, concern, or organization exists.
__ Each such person, concern, or organization is listed below.

Separate verified statements are required from each named person, concern or organization having the rights to the invention averring to their status as small entities. (37 CFR 1.27)

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

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NAME OF PERSON SIGNING

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ADDRESS OF PERSON SIGNING

SIGNATURE

9/22/99
DATE

PTO/SB/ 09 (10-92)

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

P:\PUBLIC\PATENT\VIEWIT\5865-7\

Attorney Docket No. 5865-7

APPARATUS AND METHOD FOR PRODUCING ENHANCED VIDEO IMAGES AND/OR VIDEO FILES

FIELD OF THE INVENTION

The present invention is directed to an apparatus and a method for producing enhanced images and/or video files and, in particular, to an apparatus and a method for producing enhanced resolution digital images and/or digital video files obtained via digital and/or film video cameras and/or recording devices.

BACKGROUND OF THE INVENTION

The fields of telecommunications, multimedia, and related areas, are growing at increasing rates. With this continued growth, the need for high resolution digital imagery, for utilization in conjunction with the corresponding technologies, is becoming greater. Current technologies utilize film cameras and recorders as well as digital cameras and recorders.

Conventional video and image technologies typically have very low zoom quality and low image size restrictions or limitations associated therewith. Generally speaking, enlarged images produce a higher resolution image, and an associated higher resolution scanning quality, which further facilitates an improved enlargement or reduction of the image for different

sizes and different depths, without pixel distortion. Photographs, negatives, and associated images, utilize pixels which typically have a certain size. When enlarged or reduced, these pixels of the image become distorted, a feature which typically results in the image being fixed to an original size, or being available at very low magnifications, such as, for example, magnifications of from 200 times to 300 times. These images are also difficult to enlarge to a full screen size without a tremendous amount of distortion present in the end product.

Currently, panoramic imaging techniques utilize non-enlarged images as their starting point. With such associated limitations, the ability to provide enhanced resolution digital images and, especially, an enhanced resolution digital panoramic image, such as those utilized on, or over, the Internet and/or the World Wide Web, has been greatly compromised.

Another major drawback in the current technology lies in the fact that conventional processes often utilize panoramic lenses in order to capture an image. This practice has been criticized as creating distortions in the image immediately upon the image's enlargement or reduction. The conventional techniques associated with the use of panoramic lenses are known to result in image "bending", which further curtails one's ability to obtain realistic views, especially upon performing any associated

cropping and/or editing processes. In such instances, the upper end and the lower end of the image must be either erased, or covered, in order to prevent the flaw from being exposed. This typically results in the resulting image having a "fishbowl-type" distortion.

In some instances, wide angle lenses have been utilized in order to obtain enhanced floor to ceiling images without experiencing image bending. In these applications, however, the ability of the lens to capture optimal images varies depending upon the scene or image being photographed.

As a result, the ability to obtain enhanced video images and/or video files from film cameras and film recorders, from negatives and from digital cameras and recorders, has been limited.

SUMMARY OF THE INVENTION

The present invention provides an apparatus and a method for providing enhanced digital video images and/or digital video files which overcomes the shortcomings of the prior art. The digital images and/or digital files produced by utilizing the present invention can be easily managed, when displayed, projected, and/or posted on any viewing device and/or entity such

as, but not limited to, an Internet Web server, Web site or Web page, television, etc.

The present invention provides an apparatus and a method for producing enhanced digital video images and video files from video which may be recorded as print film image or file, a negative image or file, and/or a digital video image and/or file. The video images and/or files may be obtained via a digital camera, a digital recording device, a digital recorder, a digital camcorder, a film video camera, recorder, and/or camcorder, a VHS video camera, recorder, and/or camcorder, a beta video camera, recorder, and/or camcorder, and/or any other suitable video recording device.

The video images and/or video files which are produced by the apparatus and method of the present invention have improved and enhanced resolution and require far less effort in the associated maintenance and management of same. The video images and/or files, which are produced by the apparatus and method of the present invention, can be utilized and displayed on computers, projection devices, televisions, and, as noted above, can be posted to an Internet Web server, a Web site, and/or a Web page. The video images and/or files can be transmitted over a communication network and/or in computer-to-computer applications.

The present invention, in a preferred embodiment, is utilized to produce enhanced video images and/or files for posting and/or for downloading, to a digital display medium, which in the preferred embodiment, is an Internet and/or a World Wide Web server, a Web site, and/or Web page. In this manner, enhanced video images and/or video files can be produced from video images and/or video files which can be recorded using any video recording device and recording medium such as, but not limited to, digital cameras, digital recorders, film cameras, film recorders, etc. The video images and/or files obtained are thereafter processed in accordance with the apparatus and method of the present invention in order to produce enhanced video images and/or video files.

These resulting video images and/or video files have enhanced resolution which is unaffected by the typical resolution limiting and degrading parameters and phenomena which are associated with conventional digital and/or film video cameras, recorders and corresponding processing equipment, methods and/or techniques.

The apparatus can include a video camera or recorder which can be any one of an analog camera and/or a digital camera, an analog and/or digital recording device, an analog and/or digital camcorder, a film camera, a film recording device, and/or a film camcorder. For full motion video, a 3CCD chip, and/or any other

appropriate and/or suitable motion capture recording device, can be utilized in conjunction with the present invention. The camera can also be a hand-held camera, a fixed camera, and/or a camera which is mountable, such as on a tripod or on a stand. The camera can be utilized to obtain the video image and/or video file which will be processed in accordance with the present invention.

The present invention preserves image integrity from the point of capture of the image through and including any final compression or compressions of same. The apparatus can also include a developing device, which can be utilized for developing video images and/or files which are obtained on film. In the case of video images and/or files which are obtained digitally, no developing device would be needed. The apparatus can also include an enlarging device which can be utilized to enlarge the video images obtained. An enlarger can be utilized for enlarging either film images and/or digital images.

The apparatus can also include a computer, for performing the various processing routines during operation of the apparatus and method of the present invention. The computer may be a personal computer, a laptop computer, a mini-computer, a microcomputer, a mainframe computer, a network computer, a server computer, and/or any other suitable computer or computer system.

The computer can include a central processing unit (CPU), a read only memory (ROM), a random access memory (RAM), a display device, an input device and an output device. The input device may include a keyboard, a mouse, or other pointing device, and/or any other data and/or command input device, for allowing for data and/or command input by a user. The output device may include a printer and, in the preferred embodiment, the printer may be a color laser printer or a color inkjet printer. The computer can also include a receiver for receiving data and/or information over a communication network and a transmitter for transmitting data and/or information over the communication network.

The computer can also include a video capture device, which may or may not be an integral component of the computer. The video capture can also be an external peripheral device. Video data and/or information can be fed into, and/or played through, the video capture device, thereby digitizing the video data and/or information. The present invention preserves the integrity of any and/or all data and/or information upon conversion to digital formats. If full motion video is captured, any conversion can utilize full motion capture software and/or hardware. The video data and/or information can be fed into, and/or through, the video capture card, in real-time, thereby facilitating real-time video transmissions.

The computer can also include any other hardware device or peripheral device and/or software which is, or which may be, needed and/or desired in order to perform any of the functions and/or operation described herein. The computer can also include a video data capture device for capturing and processing the video images and/or files processed by the present invention.

The apparatus can also include a scanning device, for scanning video images or files, if needed, whether they be of a digital or of a print film type, in order to obtain a digital image representation of same.

The apparatus and method of the present invention provides video images and/or files which have enhanced resolution and quality while requiring less file management efforts.

The resulting video images and/or files which are obtained via the apparatus and method of the present invention are characterized by a high definition resolution and are suitable for high definition television, Web television, and large, full screen, panoramic Internet applications, including video playback and/or video transmission, which preserving resolution upon image and/or video file magnification or reduction.

The present invention also facilitates high speed file transfers of high resolution video images and/or video files,

thereby dispensing with the need to engage in long and slow conventional file downloads and/or file transfers.

The apparatus and method of the present invention can also be utilized in conjunction with three-dimensional images and video files in order to produce high resolution, three-dimensional video images and/or video files.

Accordingly, it is an object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files from files obtained via digital and/or film video cameras and/or a recording devices.

It is another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files from files obtained via digital and/or film video cameras and/or a recording devices, which have improved and enhanced resolution.

It is still another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, from files obtained via digital and/or film video cameras and/or a recording

devices digital images, which are suitable for display and/or for downloading to a digital computer, a television, and/or any other communication device utilized in a telecommunication environment and/or communications environment.

It is still another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, from files obtained via digital and/or film video cameras and/or a recording devices, which are characterized by image compression and/or minimal image compression thereby avoiding any dramatic loss in image quality.

It is another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, from files obtained via digital and/or film video cameras and/or a recording devices, which may dispense with the need to compress the image data.

It is yet another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, from files obtained via digital and/or film video cameras and/or a recording devices, which are characterized by high definition resolution, and which are suitable for high definition television, Web television and

large, full screen, panoramic internet applications, without loss of resolution upon image magnification or reduction.

It is another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, from files obtained via digital and/or film video cameras and/or a recording devices, which can be transmitted in a network environment.

It is still another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, from files obtained via digital and/or film video cameras and/or a recording devices, which facilitates high speed file transfer in a network environment and/or in a computer environment.

It is another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, which preserves image integrity from the point of capture of the image through and including final compression or compressions.

It is still another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, which

preserves the integrity of any and/or all data and/or information upon conversion to digital formats.

Other objects and advantages of the present invention will be apparent to those skilled in the art upon a review of the Description of the Preferred Embodiment taken in conjunction with the Drawings which follow.

BRIEF DESCRIPTION OF THE DRAWINGS

In the Drawings:

Figure 1 illustrates the apparatus of the present invention, in block diagram form; and

Figures 2A, 2B and 2C illustrate the method of the present invention, in flow diagram form.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The present invention provides an apparatus and a method for providing enhanced digital video images and/or digital video files which can be utilized and which can be easily managed, when displayed, projected, and/or posted on any viewing device and/or entity such as, but not limited to, an Internet Web server, Web site or Web page, television, etc. In particular, the present

invention provides an apparatus and a method for producing enhanced digital video images and video files from video which may be recorded as a digital video image and/or files and/or as a film video image and/or file a print film image.

The video images and/or files may be obtained via a digital camera, a digital recording device, a digital recorder, a digital camcorder, a film video camera, recorder, and/or camcorder, a VHS video camera, recorder, and/or camcorder, a beta video camera, recorder, and/or camcorder, and/or any other suitable video recording device. The video images and/or video files which are produced by the apparatus and method of the present invention have improved and enhanced resolution and require far less effort in the associated maintenance and management of same. The video images and/or files, which are produced by the apparatus and method of the present invention, can be utilized and displayed on computers, projection devices, televisions, and, as noted above, can be posted to an Internet Web server, a Web site, and/or a Web page. The video images and/or files can be transmitted over a communication network and/or in computer-to-computer applications.

The present invention, in a preferred embodiment, is utilized to produce enhanced video images and/or files for posting and/or for downloading, to a digital display medium, which in the preferred embodiment, is an Internet and/or a World

Wide Web server, a Web site, and/or Web page. In this manner, enhanced video images and/or video files can be produced from video images and/or video files which can be recorded using any video recording device and recording medium such as, but not limited to, digital cameras, digital recorders, film cameras, film recorders, etc. The video images and/or files obtained are thereafter processed in accordance with the apparatus and method of the present invention in order to produce enhanced video images and/or video files.

These resulting video images and/or video files have enhanced resolution which is unaffected by the typical resolution limiting parameters and phenomena which are associated with conventional digital and film video cameras, recorders and corresponding processing equipment, methods and/or techniques.

Figure 1 illustrates the apparatus of the present invention which is denoted generally by the reference numeral 100, in block diagram form. With reference to Figure 1, the apparatus 100 includes a video camera or recorder 105 which, in the preferred embodiment, can be any one of a digital camera, a digital recording device, digital camcorder, a film camera, a film recording device, and/or a film camcorder. In the preferred embodiment, the camera 105 may be a hand-held camera, a fixed camera, and/or a camera which is mountable, such as on a tripod or on a stand. The camera 105 is utilized to obtain the video

image and/or video file which will be processed as described herein.

For full motion video, a 3CCD chip, and/or any other appropriate and/or suitable motion capture recording device, can be utilized in conjunction with the present invention.

The present invention can also be utilized in conjunction with any imaging and/or any video recording device and/or equipment, such as, but not limited to, those devices and equipment utilized in, or in conjunction with, medical imaging equipment, devices and/or instruments, motion picture production equipment, devices and/or instruments and/or in any other equipment, device, and/or instrument, which is, or which can be, utilized in conjunction with imaging and/or video applications and/or uses.

The apparatus 100 also includes a developing device 115, which would be utilized for developing video images and/or files which are obtained on film. In the case of video images and/or files which are obtained digitally, no developing device. The apparatus also includes an enlarging device which can be utilized to enlarge the video images obtained. The apparatus can include an enlarger for both film images as well as for digital images.

The apparatus 100 also includes a computer 120, for performing the various processing routines during operation of the apparatus and method of the present invention. The computer 120 may be a personal computer, a laptop computer, a mini-computer, a microcomputer, a mainframe computer, a network computer, a server computer, and/or any other suitable computer or computer system.

The computer 120 includes a central processing unit (CPU), a read only memory (ROM), a random access memory (RAM), a display device, an input device and an output device. The input device may include a keyboard, a mouse, or other pointing device, and/or any other data and/or command input device, for allowing for data and/or command input by a user. The output device may include a printer and, in the preferred embodiment, the printer may be a color laser printer or a color inkjet printer. The computer 120 also includes a receiver for receiving data and/or information over a communication network and a transmitter for transmitting data and/or information over the communication network.

The computer 120 also includes a video capture device 121 which, in the preferred embodiment, is an integral component of the computer 120. The video capture device 121, in the preferred embodiment, is a video capture card 121 which is located internal to the computer 120. The video computer device 121 may also be an external peripheral device. As described

herein, the video data and/or information is fed into, and/or played through, the video capture device 121, thereby digitizing the video data and/or information. The video data and/or information can be fed into, and/or through, the video capture card 121, in real-time, thereby facilitating real-time video transmissions.

The computer 120 may also include any other hardware device or peripheral device and/or software which is, or which may be needed and/or desired in order to perform any of the functions and/or operation described herein. In particular, the computer 120 will also include a video data capture device for capturing and processing the video images and/or files processed by the present invention.

The apparatus 100 also includes a scanning device 125, for scanning video images or files, if needed, whether they be digital or of a print film type, in order to obtain a digital image representation of same. Any suitable computer or scanner, and any suitable scanning software, may be utilized in conjunction with the present invention. In a preferred embodiment, any suitable scanning device can be utilized in conjunction with any appropriate software.

Figures 2A, 2B and 2C illustrate the method of the present invention, in flow diagram form. With reference to Figures 2A, 2B and 2C, the method of the present invention commences at step 200. At step 201, the video images and/or files are recorded with the video camera 105. The video can be recorded in any format, such as, but not limited to, i.e., beta, VHS, digital, and/or any of the standard file formats, including, but not limited to, *.AVI, *.MOV, *.MPEG, etc., by utilizing the video recording device 105. The video recording device 105 may also be a reel-to-reel recording device and/or a live video recording device.

At step 202, the video images and/or files are converted to a converted to digital files, if necessary, by utilizing the scanner 110. At step 203, digital video image files are loaded into the computer 120 for processing. At step 204, the video image files are fed into, or through, the capture device 121 of the computer 120. The video capture operation, which is performed by the video capture device 121, in the preferred embodiment, can be performed without compression and/or encoding operations being performed on the video image files and/or with only minimal compression and/or encoding operations being performed on the video image files.

The video capture device, in the preferred embodiment, can be any suitable video capture device or card and/or any other

appropriate and/or suitable video capture hardware. The capture software utilized can be any appropriate and/or suitable video capture software.

At step 205, the video images and/or files are edited, if necessary, by using any standard video editing tools, such as, for example, any editing software. At step 206, the video image files are then converted to any suitable real video format such as, for example, a *.RM format. At step 207, the size of the video within the file code is set either manually or automatically. In the preferred embodiment, the size of the video is set within the file code, which may or may not be the HTML file code to a 640 x 480 frame resolution, or any other suitable resolution, such as, but not limited to, 800 x 600, 1024 x 768, 1280 x 1024, 1600 x 1200 or other sizes.

At step 208, the obtained video image file or files is then posted to the computer 120 and/or to another hosting computer. If the posting is to an computer other than the computer 120, the posting is performed by transmitting the video file or files over a communication network to the hosting computer. In the preferred embodiment, the video file or files are posted via the Internet, and/or the World Wide Web, and can posted to a Web Page, a Web site, and/or any other network device. The posting operation is performed by utilizing any suitable posting software.

At step 209, the computer 120 or other hosting computer generates or writes a file or script, such as an ASCII file which calls the video to stream or to download. This results in video which will stream or "streaming" video for a full screen application which will be characterized by a good clarity and quality. At step 210, a separate file or script, such as an ASCII file is written and saved to an appropriately formatted file, such as an *.RPM file, or other suitable file format, which will call the original video file. This script can be typically included in any suitable code, such as an HTML code.

In the case of MPEG videos, Steps 201 through 203 are followed as described above. At step 204, however, the video file is converted, if not previously converted, to an MPEG format. Thereafter, the video is inserted into the appropriate file which may contain suitable coding, such as HTML codes. Thereafter, the file can be sized to any of herein-described resolutions. Thereafter, the video file is uploaded to the hosting computer, if utilized. Thereafter, the MPEG file is played from the computer 120 or the hosting computer, the Web page, and/or the Web site, depending upon the application, by first downloading a small portion of the file and by playing the file through a suitable device such as a player which supports any suitable video formats, such as AVI, MPEG-type, etc., and/or other suitable formats.

Thereafter, operation of the apparatus ceases at step 210.

The processing steps described herein provide for the production of video images and/or video files which have enhanced resolution and which can be easily and effectively managed in applications involving the display of same, the posting of same, to a host computer, a Web server, a Web site, a Web page, a computer display, a full screen projection display and/or a video presentation and/or playback of same, respectively. Further, the method of the present invention provides for image processing, including various image and/or file processing techniques, which may or may not include image compression and/or encoding operations.

The apparatus and method of the present invention provides video images and/or files which have enhanced resolution and quality while requiring less file management efforts.

The resulting video images and/or files which are obtained via the apparatus and method of the present invention are characterized by a high definition resolution and are suitable for high definition television, Web television, and large, full screen, panoramic Internet applications, including video playback and/or video transmission, which preserving resolution upon image and/or video file magnification or reduction. The present invention also dispenses with the need for plug-in software

during download and/or file transfer operations. The present invention also facilitates high speed file transfers of high resolution video images and/or video files, thereby dispensing with the need to engage in long and slow conventional file downloads and/or file transfers.

The apparatus and method of the present invention can also be utilized in conjunction with three-dimensional images and video files in order to produce high resolution, three-dimensional video images and/or video files.

The present invention preserves image integrity from the point of capture of the image through, and including, any final compression or compressions of same.

The present invention also preserves the integrity of any and/or all data and/or all information upon conversion to digital formats. If full motion video is captured, any conversion can utilize full motion capture software and/or hardware.

The resulting video images and/or files, which are obtained via the apparatus and method of the present invention, can be utilized, in any and/or all of the embodiments described herein, in conjunction with data and/or information which can be provided by any other and/or any external information source. The data and/or information may contain, but is not limited to, data

and/or information of and for sound and/or audio files, text files, video files, image files, and/or graphics files, and/or any other information source, data, information and/or file, which can be, and/or which may be linked to or with, and/or which can be operated and/or utilized in conjunction with, any video and/or image data and/or information. For example, any image and/or video data, information, or file, obtained via the present invention, can be utilized in conjunction with any sound file, audio file, text file, video file, image file, and/or graphics file, and/or any other data, information and/or file utilized in a multimedia environment, thereby providing for the utilization of enhanced images and/or video in conjunction with the respective file.

While the present invention has been described and illustrated in various preferred embodiments, such descriptions are merely illustrative of the present invention and are not to be construed to be limitations thereof. In this regard, the present invention encompasses any and all modifications, variations, and/or alternate embodiments, with the scope of the present invention being limited only by the claims which follow.

CLAIMS

What Is Claimed Is:

1. An apparatus for producing a digital image, comprising:

a device for generating a digital signal file from an image; and

a processor for processing said digital signal file and for generating an image file,

wherein said processor generates a first signal file from said digital signal file, and further wherein said processor processes said first signal file and generates said image file.

2. The apparatus of claim 1, further comprising:

one of a camera and a recording device for obtaining one of a photographic representation of an image, a film image, a negative image and a digital image.

3. The apparatus of claim 2, further comprising:

a developing device for developing one of said photographic representation of an image, a film image and a negative image.

4. The apparatus of claim 3, further comprising:

an enlarging device for enlarging said image.

5. The apparatus of claim 4, further comprising:

a scanning device for generating said digital signal file from said one of photographic representation of an image, a film image and a negative image.

6. The apparatus of claim 1, further comprising:

a video capture device for one capturing and processing said digital signal file.

7. The apparatus of claim 1, wherein said first signal file is an image file.

8. An apparatus for producing a digital image, comprising:

means for generating a digital signal file from an image file; and

means for processing said digital signal file and for generating an image file,

wherein said processing means generates a first signal file from said digital signal file, and further wherein said processing means processes said first signal file and generates said image file.

9. The apparatus of claim 8, further comprising:

means for obtaining said one of a photographic representation of an image, a film image, a negative image and a digital image.

10. The apparatus of claim 8, further comprising:

means for developing said one of photographic representation of an image, a film image and a negative image.

11. The apparatus of claim 8, further comprising:

means for enlarging said image.

12. The apparatus of claim 8, further comprising:

means for generating said digital signal file from said image.

13. The apparatus of claim 8, further comprising:

means for one of capturing and processing said digital signal file.

14. A method for producing a digital image, comprising:

generating a digital signal file from an image;

processing said digital signal file; and

generating an image file, wherein said processing operation further comprises:

generating a first signal file from said digital signal file; and

processing said first signal file and generating said image file.

15. The method of claim 14, further comprising:

obtaining one of a photographic representation of an image, a film image, a negative image and a digital image..

16. The method of claim 14, further comprising:

developing said one of photographic representation of an image, a film image, and a negative image; and

generating said image.

17. The method of claim 14, further comprising:

enlarging said image.

19. The method of claim 14, further comprising:

generating said digital signal file from said image.

20. The method of claim 14, further comprising:

one of capturing and processing said digital signal file.

21. The apparatus of any one of claims 1 to 13, wherein said image file is utilized in conjunction with at least one of a sound file, an audio file, a text file, a video file, an image file, and a graphics file.

22. The method of any one of claims 14 to 20, wherein said image file is utilized in conjunction with at least one of a sound

file, an audio file, a text file, a video file, an image file, and a graphics file.

ABSTRACT OF THE DISCLOSURE

An apparatus and method for producing a digital image, including a device for generating a digital signal file from an image and a processor for processing said digital signal file and for generating an image file. The processor generates a first signal file from the digital signal file. The processor processes the first signal file and generates the image file.

P:\PUBLIC\PATENT\CLIDEV\

Attorney Docket No.: 5865-7

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

POWER OF ATTORNEY

Application of:	Eliot I. Bernstein
Serial No.:	Please assign
Filed on:	Concurrently herewith
Title:	APPARATUS AND METHOD FOR PRODUCING ENHANCED DIGITAL VIDEO IMAGES AND/OR VIDEO FILES

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of the sole inventor (given name, family name): ELIOT I. BERNSTEIN	
Inventor's signature: >	Date: > 9/22/99
Residence: 500 S.E. Mizner Boulevard Suite 182 Boca Raton, FL 33432-6000	Citizenship: U.S.A.
Post Office Address: SAME AS ABOVE	

P:\PUBLIC\PATENT\VIEW\T5865-7\

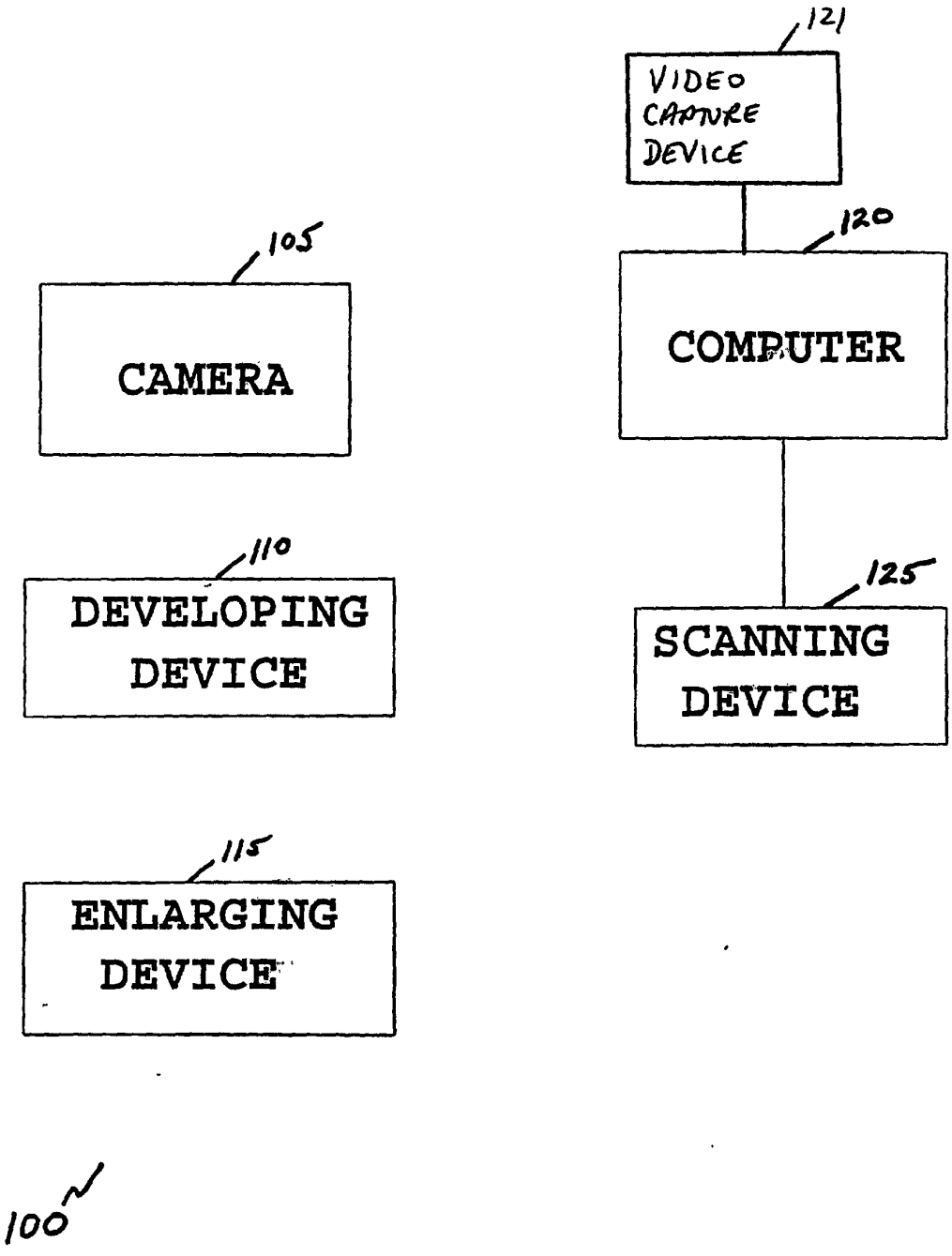
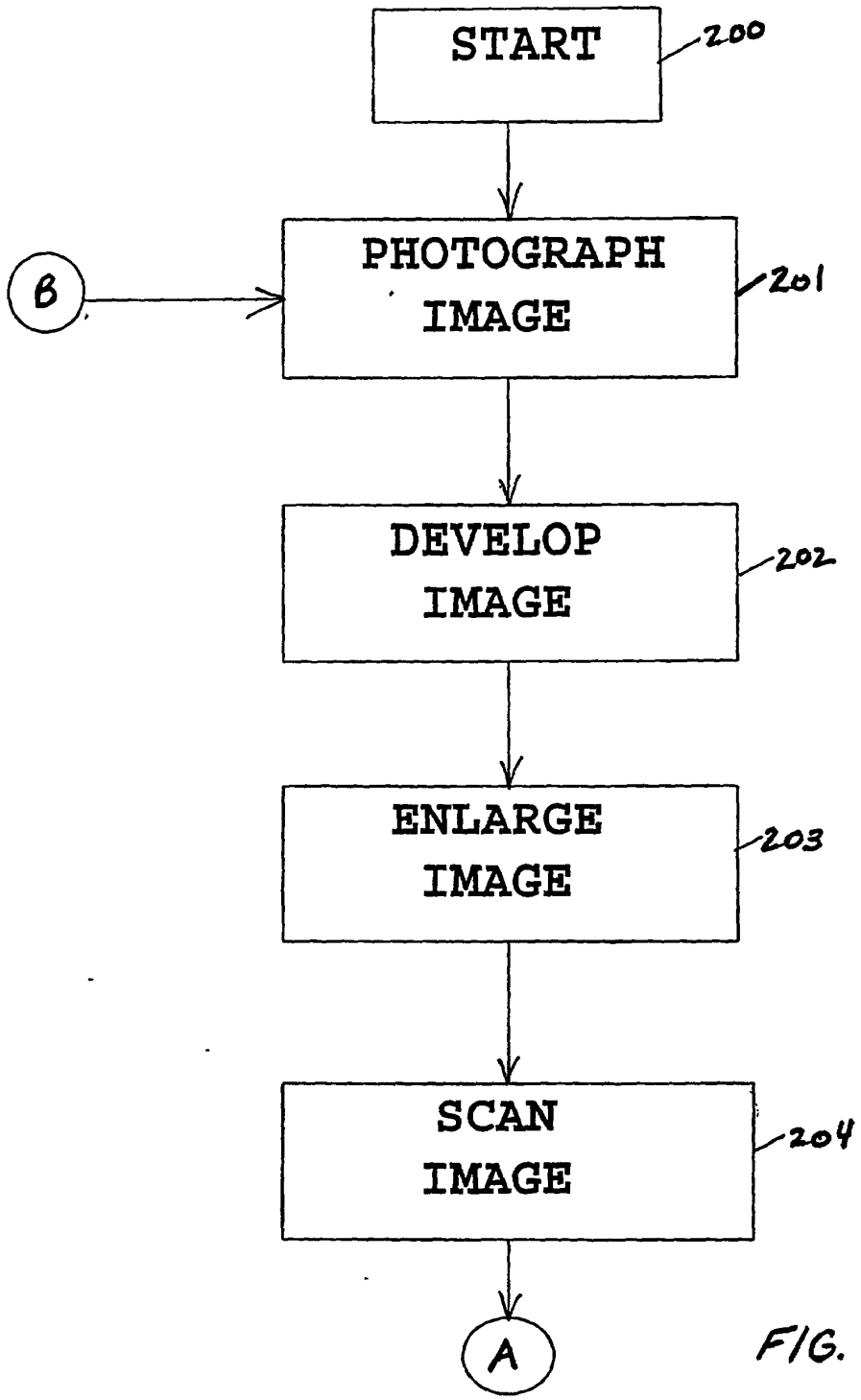

121
VIDEO CAPTURE DEVICE
120
COMPUTER
105
CAMERA
110
DEVELOPING DEVICE
125
SCANNING DEVICE
115
ENLARGING DEVICE
100

FIG. 1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201
DEVELOP IMAGE
202
ENLARGE IMAGE
203
SCAN IMAGE
204
A

FIG. 2A

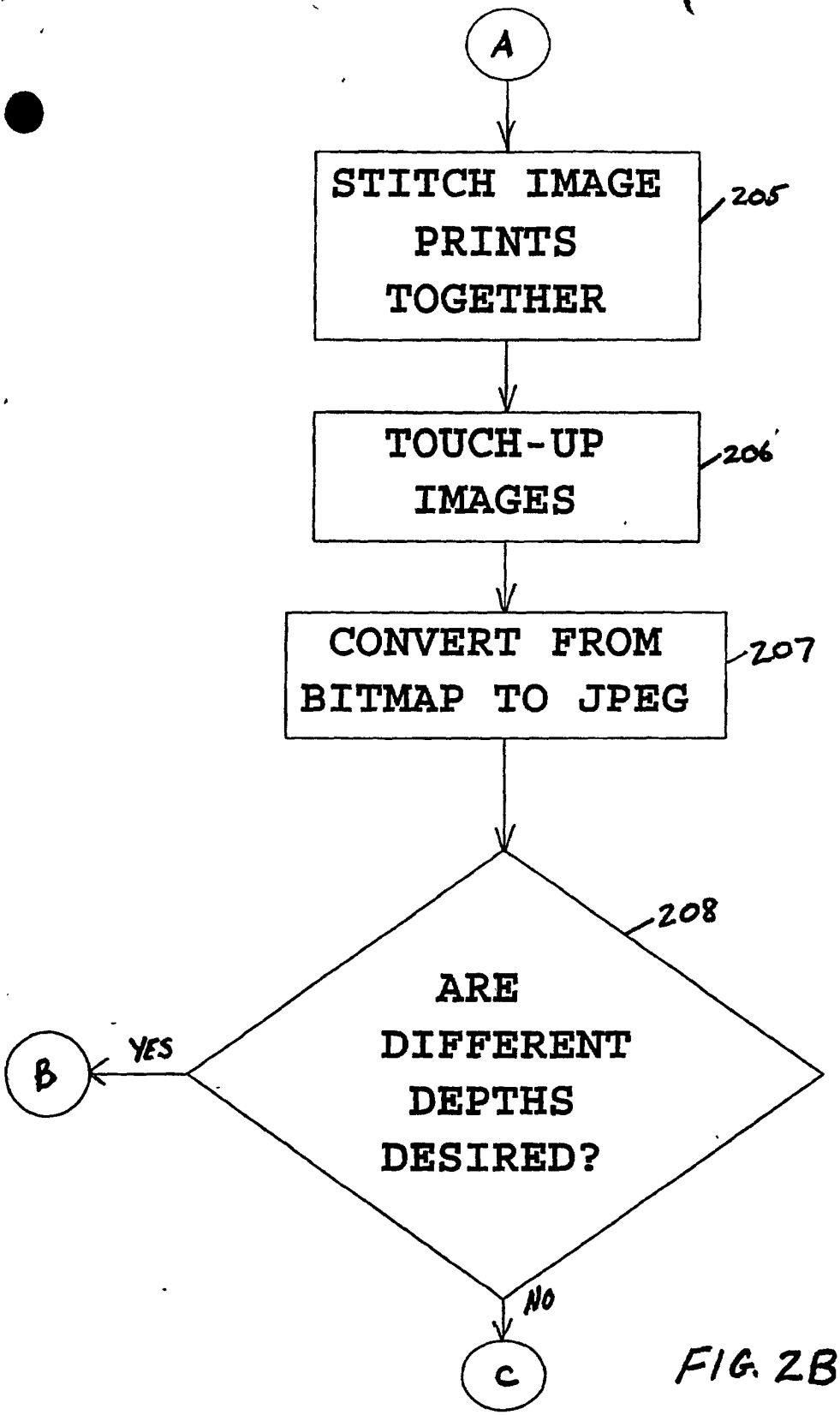

A
STITCH IMAGE PRINTS TOGETHER
205
TOUCH-UP IMAGES
206
CONVERT FROM BITMAP TO JPEG
207
ARE DIFFERENT DEPTHS DESIRED?
208
YES
B
NO
C

FIG. 2B

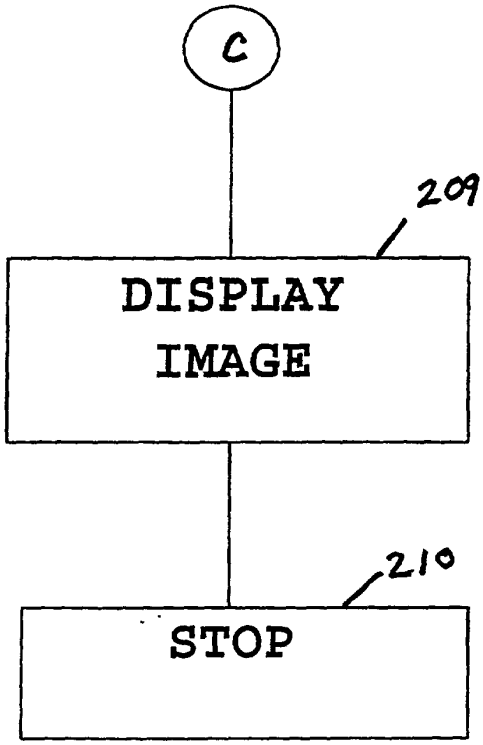
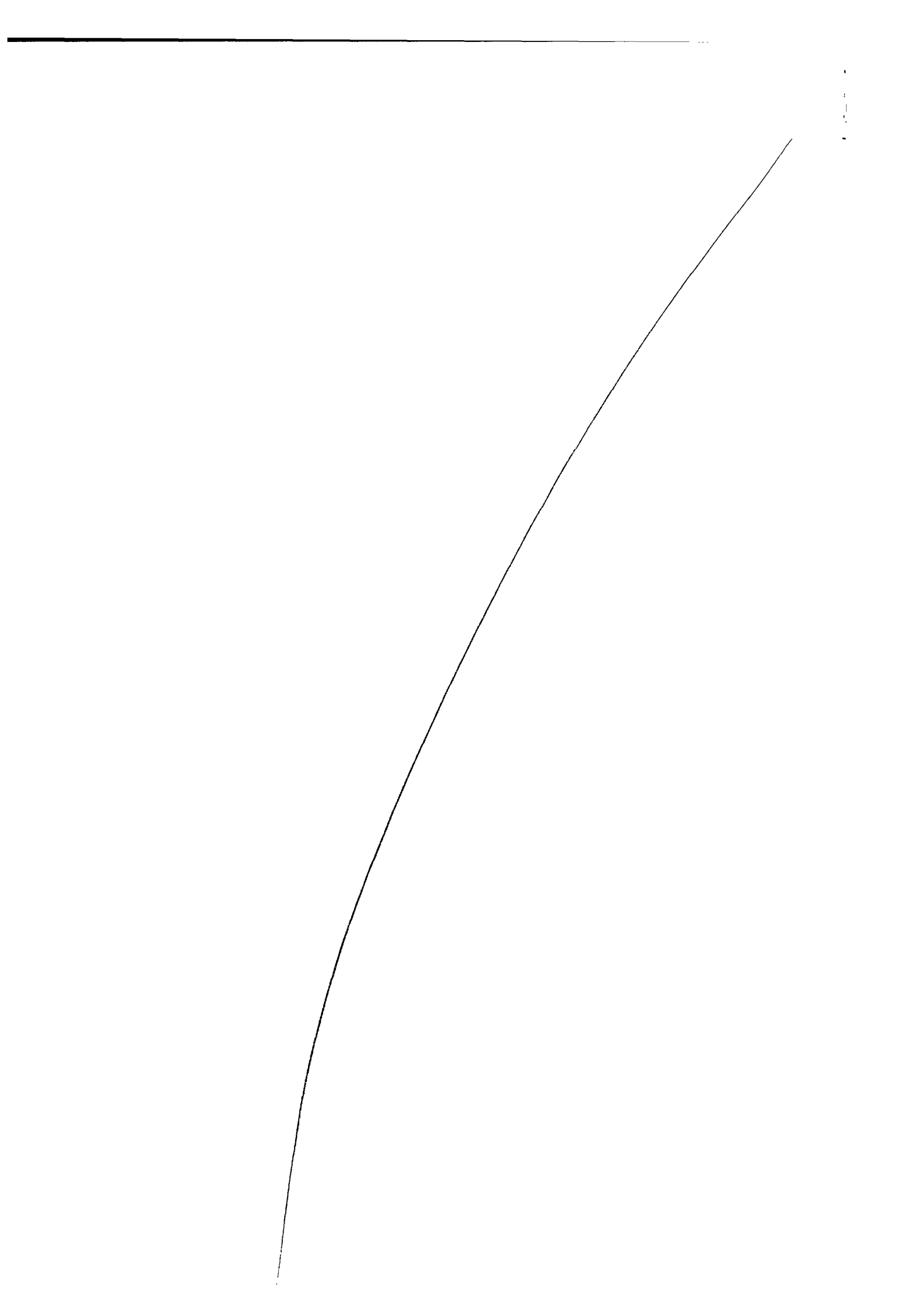


FIG. 2C



P1 282564

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August 07, 2000

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APPLICATION NUMBER: ***60/169,559***
FILING DATE: ***December 08, 1999***
PCT APPLICATION NUMBER: *PCT/US00/15405*

By Authority of the
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Certifying Officer

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PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53 (c).

INVENTOR(S)		
Given Name (first and middle [if any])	Family Name or Surname	Residence (City and either State or Foreign Country)
ELIOT	BERNSTEIN	500 S.E. Mizner Road Suite 102 Boca Raton, FL 33432

☐ *Additional inventors are being named on the ___ separately numbered sheets attached hereto*

TITLE OF THE INVENTION (280 characters max)

APPARATUS AND METHOD FOR PRODUCING ENHANCED VIDEO IMAGES AND/OR VIDEO FILES

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ENCLOSED APPLICATION PARTS *(check all that apply)*

[X] Specification *Number of Pages*	47	☐ Small Entity Statement	
[X] Drawing(s) *Number of Sheets*	5	[X] Other (specify)	return postcard

METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT *(check one)*

[X] A check or money order is enclosed to cover the filing fees

FILING FEE AMOUNT ($): $150.00

☐ The Commissioner is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number: [ ]

The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.

[X] No.

☐ Yes, the name of the U.S. Government agency and the Government contract number are: _____

Respectfully submitted,

SIGNATURE [signature]

TYPED or PRINTED NAME RAYMOND A. JOAO

TELEPHONE 516-747-0300

Date 12/8/99

REGISTRATION NO. *(if appropriate)* 35,907

Docket Number: 5865-8

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

This collection of information is required by 37 CFR 1.51. The information is used by the public to file (and by the PTO to process) a provisional application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the complete provisional application to the PTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C., 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Box Provisional Application, Assistant Commissioner for Patents, Washington, D.C., 20231.

12-09-99 A/PROV

Attorney Docket No.: 5865-8

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:	Eliot I. Bernstein
Serial No.:	Please assign
Filed on:	Concurrently herewith
Title:	APPARATUS AND METHOD FOR PRODUCING ENHANCED VIDEO IMAGES AND/OR VIDEO FILES

Box Provisional Application
Assistant Commissioner for Patents
Washington, D.C. 20231

PROVISIONAL PATENT APPLICATION TRANSMITTAL LETTER

Sir:

Please find transmitted herewith for filing the following:

(1) Provisional Application for Patent Cover Sheet;

(2) Provisional Patent Application, including Specification, Claims and Abstract of the Disclosure (47 pages) and Drawings (5 sheets);

(3) Check in the amount of $150.00 for the filing fee;

(4) Power of Attorney form; and

(5) Return Receipt Postcard.

It is respectfully requested that the above papers be filed as a Provisional Patent Application.

Respectfully submitted,
MELTZER, LIPPE, GOLDSTEIN
& SCHLISSEL, P.C.

By: _____
Raymond A. Joao
Reg. No. 35,907

December 8, 1999

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Attorney Docket No.: 5865-8

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Application of:	Eliot I. Bernstein
Serial No.:	Please assign
Filed on:	Concurrently herewith
Title:	APPARATUS AND METHOD FOR PRODUCING ENHANCED VIDEO IMAGES AND/OR VIDEO FILES

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

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Mineola, New York 11501

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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APPARATUS AND METHOD FOR PRODUCING ENHANCED VIDEO IMAGES AND/OR VIDEO FILES

FIELD OF THE INVENTION

The present invention is directed to an apparatus and a method for producing enhanced images and/or video files and, in particular, to an apparatus and a method for producing enhanced resolution digital images and/or digital video files obtained via digital and/or film video cameras and/or recording devices.

BACKGROUND OF THE INVENTION

The fields of telecommunications, multimedia, and related areas, are growing at increasing rates. With this continued growth, the need for high resolution digital imagery, for utilization in conjunction with the corresponding technologies, is becoming greater. Current technologies utilize film cameras and recorders as well as digital cameras and recorders.

Conventional print film, negative and digital, technologies typically have very low zoom quality and low image size restrictions or limitations associated therewith. Generally speaking, enlarged images produce a higher resolution image, and an associated higher resolution scanning quality, which further facilitates an improved enlargement or reduction of the image for

different sizes and different depths, without pixel distortion. Photographs, negatives, and associated images, utilize pixels which typically have a certain size. When enlarged or reduced, these pixels of the image become distorted, a feature which typically results in the image being fixed to an original size, or being available at very low magnifications, such as, for example, magnifications of from 200 times to 300 times. These images are also difficult to enlarge to a full screen size without a tremendous amount of distortion present in the end product without expanding the file size proportionately.

Currently, panoramic imaging techniques utilize non-enlarged images as their starting point. With such associated limitations, the ability to provide enhanced resolution digital images and, especially, an enhanced resolution digital panoramic image, such as those utilized on, or over, the Internet and/or the World Wide Web, has been greatly compromised.

Another major drawback in the current technology lies in the fact that conventional processes often utilize panoramic lenses in order to capture an image. This practice has been criticized as creating distortions in the image immediately upon the image's enlargement or reduction. The conventional techniques associated with the use of panoramic lenses are known to result in image "bending", which further curtails one's ability to obtain

realistic views, especially upon performing any associated cropping and/or editing processes. In such instances, the upper end and the lower end of the image must be either erased, or covered, in order to prevent the flaw from being exposed. This typically results in the resulting image having a "fishbowl-type" distortion.

In some instances, 32 mm lenses have been utilized in order to obtain enhanced floor to ceiling images without experiencing image bending. In these applications, however, the ability of the lens to capture optimal images varies depending upon the scene or image being photographed.

Images have typically been over-compressed prior to transmission over a communication network. This over compression has typically resulted in lack of image quality.

As a result, the ability to obtain enhanced video images and/or video files from film cameras and film recorders, from negatives and from digital cameras and recorders, has been limited.

SUMMARY OF THE INVENTION

The present invention provides an apparatus and a method for

providing enhanced digital video images and/or digital video files which overcomes the shortcomings of the prior art. The digital images and/or digital files produced by utilizing the present invention can be easily managed, when displayed, projected, and/or posted on any viewing device and/or entity such as, but not limited to, an Internet Web server, Web site or Web page, television, intranet computers and/or servers, and/or computers and/or servers which are utilized in wireless environments, etc.

The present invention provides for the processing, production and/or transmission of streaming video which can be transmitted on, or over, a communication network, the Internet, the World Wide Web, and/or any other communication network and/or medium. The streaming video obtained and/or transmitted via the present invention can provide for a video transmission which, once commenced, need not be stopped. The streaming video which is facilitated via the present invention can be played on demand while maintaining its streaming video nature.

The present invention provides an apparatus and a method for producing enhanced digital video images and video files from video which may be recorded as print film image or file, a negative image or file, a digital magnetic representation of a video image, an analog representation of a video image, and/or a

digital video image and/or file. The video images and/or files may be obtained via a digital camera, a digital recording device, a digital recorder, a digital camcorder, a film video camera, a recorder, and/or camcorder, a motion picture camera, a VHS video camera, recorder, and/or camcorder, a beta video camera, recorder, and/or camcorder, and/or any other suitable video recording device. The camera or recorder can be a conventional device and/or a solid state device which may contain a solid state storage medium.

The video images and/or video files which are produced by the apparatus and method of the present invention have improved and enhanced resolution and require far less effort in the associated maintenance and management of same. The video images and/or files, which are produced by the apparatus and method of the present invention, can be utilized and displayed on computers, projection devices, televisions, and, as noted above, can be posted to an Internet Web server, a Web site, and/or a Web page, an intranet computer and/or server, and/or computers and/or servers utilized in wireless environments. The video images and/or files can be transmitted over a communication network and/or in computer-to-computer applications. The video images and/or files obtained may also be stored in an appropriate storage medium, such as, but not limited to, a compact disk, a digital video disk, and/or any other appropriate digital and/or

analog storage medium.

The present invention, in a preferred embodiment, is utilized to produce enhanced video images and/or files for posting and/or for downloading, to a digital display medium, which in the preferred embodiment, is an Internet and/or a World Wide Web server, a Web site, and/or Web page, and/or an intranet computer and/or server, and/or computers and/or servers which are utilized in a wireless environment, and/or a compact disk, a digital video disk, and/or other suitable storage medium. In this manner, enhanced video images and/or video files can be produced from video images and/or video files which can be recorded using any video recording device and recording medium such as, but not limited to, digital cameras, digital recorders, film cameras, film recorders, motion picture cameras, photographic film recorders, and/or magnetic film or disk film recorders, etc. The video images and/or files obtained are thereafter processed in accordance with the apparatus and method of the present invention in order to produce enhanced video images and/or video files.

These resulting video images and/or video files have enhanced resolution which is unaffected by the typical resolution limiting and degrading parameters and phenomena which are associated with conventional digital and/or film video cameras,

recorders and corresponding processing equipment, methods and/or techniques.

The apparatus can include a video camera or recorder which can be any one of an analog camera and/or a digital camera, an analog and/or digital recording device, an analog and/or digital camcorder, a film camera, a film recording device, and/or a film camcorder. For full motion video, a 3CCD chip, and/or any other appropriate and/or suitable motion video capture recording device, can be utilized in conjunction with the present invention. A suitable audio capture device for digitizing any audio which accompanies and/or which corresponds to the video can also be utilized. The camera or recording device can be a hand-held camera, a fixed camera, and/or a camera which is mountable, such as on a tripod or on a stand. The camera can be utilized to obtain the video image and/or video file which will be processed in accordance with the present invention. The camera can also be a video recording device for recording both video and audio.

The present invention preserves image and/or video integrity, as well preserves the integrity of any audio, from the point of capture of the image through and including any final compression or compressions of same. The apparatus can also include a developing device, which can be utilized for developing video images and/or files which are obtained on film. In the

case of video images and/or files which are obtained digitally, no developing device would be needed. The apparatus can also include an enlarging device which can be utilized to enlarge the video images obtained. An enlarger can be utilized for enlarging either film images and/or digital images.

The apparatus can also include a computer, for performing the various processing routines during operation of the apparatus and method of the present invention. The computer may be a personal computer, a laptop computer, a mini-computer, a microcomputer, a mainframe computer, a network computer, a server computer, and/or any other suitable computer or computer system, television system, either of the conventional, digital, and/or high definition variety.

The computer can include a central processing unit (CPU), a read only memory (ROM), a random access memory (RAM), a display device, an input device and an output device. The input device may include a keyboard, a mouse, or other pointing device, and/or any other data and/or command input device, for allowing for data and/or command input by a user. The output device may include a printer and, in the preferred embodiment, the printer may be a color laser printer or a color inkjet printer, a compact disk recorder, a digital video disk recorder, and/or any other suitable storage medium recorder. The computer can also include

a receiver for receiving data and/or information over a communication network and a transmitter for transmitting data and/or information over the communication network.

The computer can also include a video capture device, which may or may not be an integral component of the computer. The computer can also include an audio capture device which may or may not be an integral component of the computer. The video capture can also be an external peripheral device. Video data and/or information, as well as any audio data and/or information, is utilized, can be fed into, and/or played through, the respective video capture device and audio capture device, thereby digitizing the respective video data and/or information and audio data and/or information. The present invention preserves the integrity of any and/or all data and/or information upon conversion to digital formats. If full motion video is captured, any conversion can utilize full motion capture software and/or hardware. The video data and/or information can be fed into, and/or through, the video capture device, in real-time, thereby facilitating real-time video transmissions. In a similar fashion, the audio data and/or information can be fed into, and/or through, the audio capture device, in real-time, thereby facilitating real-time audio transmissions.

The computer can also include any other hardware device or

peripheral device and/or software which is, or which may be, needed and/or desired in order to perform any of the functions and/or operation described herein. The computer can also include a video data capture device, for capturing and processing the video images and/or files processed by the present invention, as well as an audio data capture device, for capturing and processing the audio files processed by the present invention.

The apparatus can also include a scanning device, for scanning video images or files, if needed, whether they be of a digital or of a print film type, in order to obtain a digital image representation of same.

The apparatus and method of the present invention provides video images and/or files, as well as any accompanying audio files, which have enhanced resolution and quality while requiring less file management efforts.

The resulting video images and/or files, and any accompanying audio files, which are obtained via the apparatus and method of the present invention are characterized by a high definition resolution and are suitable for high definition television, Web television, and large, full screen, panoramic Internet applications, including video playback and/or video transmission, along with any accompanying audio, while preserving

resolution upon image and/or video file magnification or reduction.

The present invention also facilitates high speed file transfers of high resolution video images and/or video files, and any accompanying audio files, thereby dispensing with the need to engage in long and slow conventional file downloads and/or file transfers in order to maintain viewing quality.

The apparatus and method of the present invention can also be utilized in conjunction with three-dimensional images and video files in order to produce high resolution, three-dimensional video images and/or video files.

Accordingly, it is an object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files from files obtained via digital and/or film video cameras and/or a recording devices.

It is another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files from files obtained via digital and/or film video cameras and/or a recording devices, which have improved and enhanced resolution.

It is still another object of the present invention to provide an apparatus and a method for processing, producing, and/or transmitting streaming video for use on, or over, a communication network.

It is another object of the present invention to provide an apparatus and a method for producing streaming video which, once commenced, need not be stopped and/or halted during the subsequent transmission of same.

It is another object of the present invention to provide an apparatus and a method for producing streaming video which can be played continuously and on-demand.

It is yet another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, and accompanying audio files, from files obtained via digital and/or film video cameras and/or a recording devices, which have improved and enhanced resolution.

It is still another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, from files obtained via digital and/or film video cameras and/or a recording

devices digital images, which are suitable for display and/or for downloading to a digital computer, a television, and/or any other communication device utilized in a telecommunication environment and/or communications environment.

It is still another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, from files obtained via digital and/or film video cameras and/or a recording devices, which are characterized by image compression and/or minimal image compression thereby avoiding any dramatic loss in image quality.

It is another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, from files obtained via digital and/or film video cameras and/or a recording devices, which may dispense with the need to compress the image data.

It is yet another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, from files obtained via digital and/or film video cameras and/or a recording devices, which are characterized by high definition resolution, and which are suitable for high definition television, Web television and

large, full screen, panoramic internet applications, without loss of resolution upon image magnification or reduction.

It is another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, from files obtained via digital and/or film video cameras and/or a recording devices, which can be transmitted in a network environment.

It is still another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, from files obtained via digital and/or film video cameras and/or a recording devices, which facilitates high speed file transfer in a network environment and/or in a computer environment.

It is another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, which preserves image integrity from the point of capture of the image through and including final compression or compressions.

It is still another object of the present invention to provide an apparatus and a method for producing enhanced resolution digital images and/or digital video files, which

preserves the integrity of any and/or all data and/or information upon conversion to digital formats.

Other objects and advantages of the present invention will be apparent to those skilled in the art upon a review of the Description of the Preferred Embodiment taken in conjunction with the Drawings which follow.

BRIEF DESCRIPTION OF THE DRAWINGS

In the Drawings:

Figure 1 illustrates the apparatus of the present invention, in block diagram form; and

Figures 2 illustrates a method of the present invention, in flow diagram form; and

Figures 3a, 3B and 3C illustrate another method of the present invention, in flow diagram form.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The present invention provides an apparatus and a method for providing enhanced digital video images and/or digital video, as

well as any accompanying audio, files which can be utilized and which can be easily managed, when displayed, projected, and/or posted on any viewing device and/or entity such as, but not limited to, an Internet Web server, Web site or Web page, television, etc. In particular, the present invention provides an apparatus and a method for producing enhanced digital video images and video files from video, as well as any accompanying audio files, which may be recorded as a digital video image and/or files and/or as a film video image and/or file a print film image.

The present invention provides for the processing, production and/or transmission of streaming video which can be transmitted on, or over, a communication network, the Internet, the World Wide Web, and/or any other communication network and/or medium. The streaming video obtained and/or transmitted via the present invention can provide for a video transmission which, once commenced, need not be stopped. The streaming video which is facilitated via the present invention can be played on demand while maintaining its streaming video nature.

The video images and/or files, and any accompanying audio files, may be obtained via a digital camera, a digital recording device, a digital recorder, a digital camcorder, a film video camera, recorder, and/or camcorder, a VHS video camera, recorder,

and/or camcorder, a beta video camera, recorder, and/or camcorder, and/or any other suitable video recording device. The video images and/or video files and any accompanying audio files, which are produced by the apparatus and method of the present invention have improved and enhanced resolution and require far less effort in the associated maintenance and management of same. The video images and/or files, and any accompanying audio files, which are produced by the apparatus and method of the present invention, can be utilized, displayed, and/or played, whichever the case may be, on computers, projection devices, televisions, and, as noted above, can be posted to an Internet Web server, a Web site, and/or a Web page. The video images and/or files, and any accompanying audio files, can be transmitted over a communication network and/or in computer-to-computer applications.

The present invention, in a preferred embodiment, is utilized to produce enhanced video images and/or files, and any accompanying audio files, for posting and/or for downloading, to a digital display medium, which in the preferred embodiment, is an Internet and/or a World Wide Web server, a Web site, and/or Web page. In this manner, enhanced video images and/or video files, and any accompanying audio files, can be produced from video images and/or video files, and accompanying audio files, which can be recorded using any video recording device and

recording medium such as, but not limited to, digital cameras, digital recorders, film cameras, film recorders, etc. The video images and/or files, and any accompanying audio files, obtained are thereafter processed in accordance with the apparatus and method of the present invention in order to produce enhanced video images and/or video files.

These resulting video images and/or video files, and any accompanying audio files, have enhanced resolution which is unaffected by the typical resolution limiting parameters and phenomena which are associated with conventional digital and film video cameras, recorders and corresponding processing equipment, methods and/or techniques.

Figure 1 illustrates the apparatus of the present invention which is denoted generally by the reference numeral 100, in block diagram form. With reference to Figure 1, the apparatus 100 includes a video camera or recorder 105 which, in the preferred embodiment, can be any one of a digital camera, a digital recording device, digital camcorder, a film camera, a film recording device, and/or a film camcorder. The camera or recorder can be a conventional device and/or a solid state device which may contain a solid state storage medium.

The camera or recording device can record video as well as

audio data and/or information. In the preferred embodiment, the camera 105 may be a hand-held camera, a fixed camera, and/or a camera which is mountable, such as on a tripod or on a stand. The camera 105 is utilized to obtain the video image and/or video file, as well as any audio files, which will be processed as described herein.

For full motion video, a 3CCD chip, and/or any other appropriate and/or suitable motion and/or video capture recording device, can be utilized in conjunction with the present invention. A suitable audio capture recording device can also be utilized in conjunction with the present invention.

The present invention can also be utilized in conjunction with any imaging and/or any video recording device, and/or audio recording device, and/or equipment, such as, but not limited to, those devices and equipment utilized in, or in conjunction with, medical imaging equipment, devices and/or instruments, motion picture production equipment, devices and/or instruments and/or in any other equipment, device, and/or instrument, which is, or which can be, utilized in conjunction with imaging and/or video and/or audio applications and/or uses.

The apparatus 100 also includes a developing device 115, which could be utilized for developing video images and/or files

which are obtained on film. In the case of video images and/or files which are obtained digitally, no developing device may be needed. The apparatus also includes an enlarging device which can be utilized to enlarge the video images obtained. The apparatus can include an enlarger for both film images as well as for digital images.

The apparatus 100 also includes a computer 120, for performing the various processing routines during operation of the apparatus and method of the present invention. The computer 120 may be a personal computer, a laptop computer, a mini-computer, a microcomputer, a mainframe computer, a network computer, a server computer, and/or any other suitable computer or computer system.

The computer 120 includes a central processing unit (CPU), a read only memory (ROM), a random access memory (RAM), a display device, an input device and an output device. The input device may include a keyboard, a mouse, or other pointing device, and/or any other data and/or command input device, for allowing for data and/or command input by a user. The output device may include a printer and, in the preferred embodiment, the printer may be a color laser printer or a color inkjet printer. The computer 120 also includes a receiver for receiving data and/or information over a communication network and a transmitter for transmitting

data and/or information over the communication network.

The computer 120 also includes a video capture device 121A and an audio capture device 121B, which, in the preferred embodiment, are integral components of the computer 120. The video capture device 121A, in the preferred embodiment, can be a video capture card 121A which is located internal to the computer 120. The video capture device 121A may also be an external peripheral device. As described herein, the video data and/or information is fed into, and/or played through, the video capture device 121A, thereby digitizing the video data and/or information. The video data and/or information can be fed into, and/or through, the video capture card 121A, in real-time, thereby facilitating real-time video transmissions.

In a similar manner, the audio capture device 121B, in the preferred embodiment, can be an audio capture card 121B which is located internal to the computer 120. The audio capture device 121 may also be an external peripheral device. As described herein, the audio data and/or information is fed into, and/or played through, the audio capture device 121B, thereby digitizing the audio data and/or information. The audio data and/or information can be fed into, and/or through, the audio capture card 121B, in real-time, thereby facilitating real-time audio transmissions.

The computer 120 may also include any other hardware device or peripheral device and/or software which is, or which may be needed and/or desired in order to perform any of the functions and/or operation described herein. In particular, the computer 120 will also include a video data capture device for capturing and processing the video images and/or files processed by the present invention. The computer 120 can also include an audio capture device for capturing and processing the audio files processed by the present invention.

The computer 120 also includes a transmitter (not shown) and a receiver (not shown) for facilitating operation in a network environment and/or as a server computer.

The apparatus 100 also includes a scanning device 125, for scanning video images or files, if needed, whether they be digital or of a print film type, in order to obtain a digital image representation of same. Any suitable computer or scanner, and any suitable scanning software, may be utilized in conjunction with the present invention. In a preferred embodiment, any suitable scanning device can be utilized in conjunction with any appropriate software.

Figure 2 illustrates a preferred embodiment method of the present invention, in flow diagram form. With reference to

Figure 2, the method of the present invention commences at step 200. The method described herein can be utilized to process both video and audio files as well as files which contain only video information. For the sake of explaining the present invention in a preferred embodiment, the processing of video files along with corresponding audio files is described below. At step 201, the video images or files, and corresponding audio files, are recorded with any appropriate or suitable recording device such as, but not limited to, the video recording camera 105. The video and corresponding audio can be recorded and/or otherwise obtained in any suitable format, such as, but not limited to, for example, beta, VHS, digital, and/or any other standard formats, including, but not limited to, NTSC, PAL, or SECAM. The video and corresponding audio files can also be obtained in other standard digital formats such as, but not limited to, IEEE1834, *.AVI, *.MOV, *.MPEG, etc., by utilizing an appropriately equipped video recording device. The video recording device 105 may also be a reel-to-reel recording device and/or a live video recording device.

At step 202, the respective digital files and corresponding audio files, are converted to digital files, if necessary, by utilizing respective digitizing and/or scanning hardware and/or software and/or devices. In the case of the video files, the video is digitized by utilizing digitizing hardware and/or software and/or any other necessary and/or appropriate driver

software or programs in conjunction with a video capture device. In the preferred embodiment, hardware such as Pinnacle DC10∞ or other equivalent and/or similar hardware and/or software and/or associated drivers can be utilized to perform the video digitizing operation. The video digitizing step can be performed, in the preferred embodiment, at a minimum frames per second (fps) or at least a television standard and/or 30fps and with frame sizes of at least 320 X 240 pixels.

It is understood that the herein-described video digitizing step is not limited to the settings and/or parameters described herein. Rather, any appropriate settings and/or parameters may be utilized in order to obtain digital video data and/or information which is consistent with the digital data and/or information described herein.

In an analogous manner, at step 201, the audio files are also digitized by utilizing appropriate digitizing or capture hardware and/or software and any other necessary and/or appropriate driver software or programs. In the preferred embodiment, hardware such as produced by Turtle Beach Montego∞ other equivalent and/or similar hardware and/or software, and any associated drivers, if needed, are utilized in order to perform the audio digitizing operation. The audio digitizing step can be performed, in the preferred embodiment, by utilizing PCM or an

equivalent and/or similar technique and at a sampling rate of at least 44 to 48 kilohertz (Khz), 16-bit stereo, and an audio resolution of at least 16-bits.

The video and/or audio files which are obtained via the processing routines at step 201, are digital files which can be in any standard digital format such as, but not limited to, *.AVI, *.MOV, or *.MPEG, and/or any other suitable digital file format. While video information can be obtained for any frame setting, in a preferred embodiment, frames settings of 320 x 240, 480 x 320 and/or 640 x 480 can be utilized.

At step 202, if desired the digitized video and audio files can be processed in conjunction with video editing software, such as, for example Adobe Premiere 5.1 and/or any other equivalent and/or similar editing software. The processing which is performed at step 202 is optional and need not be performed on the digital video and audio files. The processing which is performed on the digital video and audio files , at step 202, can be performed in order to facilitating the editing of the respective digital video and audio files if such may be desired.

The processing at step 202 also serves to convert the digital video and audio to respective digital formats which are amenable to various editing procedures. For example, a *.MOV formatted file is converted to a .RM file format, a *.AVI

formatted fire is converted to a .ASF file format, and a *.MPEG formatted file is converted to a .RM file format. The processing step which is performed at the optional step 202 can be preformed with the following processing parameters.

At step 203, the digital video and audio file is processed and/or encoded in order to generate the respective files for presentation from a player or server computer. The processing which occurs at step 203 is accomplished with Windows Media Encoder/Reel Producer Plus software in order to create digital files for both video and audio which are in an appropriate digital file format, such as, but not limited to .RM and .ASF, or other suitable and/or similar digital file formats. Thereafter, the digital video and audio files will be available for transmission to appropriate computers and/or communication devices, and/or for storage onto an appropriate storage medium.

The digital video and audio file, which is processed and encoded at step 203, can be transmitted at a data rate having a range of between 35Kbps to 750Kbps and can have a frame rate range of between 24 to 29.97 fps.

At step 204, the video and audio file can be transmitted from the sever computer 120 to a client computer or communication device. In the preferred embodiment, and in order to facilitate the presentation of the video and audio file at the client

computer or communication device, the presentation of the video and audio file can be accomplished in conjunction with video software such as, but not limited to, RealPlayer∞, MediaPlayer∞, and/or any other appropriate software. The transmission of the video and audio will take place with a data rate range of between 35 Kbps to 750 Kbps at with a frame rate range of between 24fps - 29.97fps.

The obtained video and audio file or files can then be posted to the computer 120 and/or to another hosting computer. If the posting is to a computer other than the computer 120, the posting is performed by transmitting the video file or files over a communication network to the hosting computer. In the preferred embodiment, the video and audio file or files are posted via the Internet, and/or the World Wide Web, and can posted to a Web Page, a Web site, and/or any other network device. The posting operation is performed by utilizing any suitable posting software. The video and audio file or video file can also be stored on a compact disk, a digital video disk and/or any other appropriate storage medium.

The above-describe processing routine facilitates the processing of digital video and audio files in such a manner that any compression, if performed, is maintained at minimum levels.

The respective video and audio files are digitized at an optimal level and thereafter encoded at an optimal level, thereby preserving the highest quality of video and audio content.

Transmission of the video and audio files to a client computer (not shown) can thereafter commence at step 205.

Typically, the various rates of transmission for the above transmission parameters will be dependent upon the type and specifications of the receiver or modem associated with the client computer or communication device. In another preferred embodiment, the server computer 120 can ascertain the receiver or modem specifications. Thereafter, the server 120 can process the information obtained regarding the client computer or communication device and determine the appropriate transmission rates and/or other parameters and commence transmission to the client computer or communication device at step 205.

Operation of the apparatus will then cease at step 206.

Figures 3A, 3B and 3C illustrate another preferred embodiment method of the present invention, in flow diagram form. With reference to Figures 3A, 3B and 3C, the method of the present invention commences at step 300. At step 301, the video images and/or files are recorded with the video camera 105. The video can be recorded in any format, such as, but not limited to,

i.e., beta, VHS, digital, and/or any of the standard file formats, including, but not limited to, *.AVI, *.MOV, *.MPEG, etc., by utilizing the video recording device 105. The video recording device 105 may also be a reel-to-reel recording device and/or a live video recording device.

At step 302, the video images and/or files are converted to a converted to digital files, if necessary, by utilizing the scanner 110. At step 303, digital video image files are loaded into the computer 120 for processing. At step 304, the video image files are fed into, or through, the capture device 121A of the computer 120. The video capture operation, which is performed by the video capture device 121A, in the preferred embodiment, can be performed with minimum compression and/or encoding operations being performed on the video image files and/or with only minimal compression and/or encoding operations being performed on the video image files.

The video capture device 121A, in the preferred embodiment, can be any suitable video capture device or card and/or any other appropriate and/or suitable video capture hardware. The capture software utilized can be any appropriate and/or suitable video capture software.

At step 305, the video images and/or files are edited, if

necessary, by using any standard video editing tools, such as, for example, any editing software. At step 306, the video image files are then converted to any suitable real video format such as, for example, a *.RM format. At step 307, the size of the video within the file code is set either manually or automatically. In the preferred embodiment, the size of the video is set within the file code, which may or may not be the HTML file code to a 640 x 480 frame resolution, or any other suitable resolution, such as, but not limited to, 800 x 600, 1024 x 768, 1280 x 1024, 1600 x 1200 or other sizes.

At step 308, the obtained video image file or files is then posted to the computer 120 and/or to another hosting computer. If the posting is to a computer other than the computer 120, the posting is performed by transmitting the video file or files over a communication network to the hosting computer. In the preferred embodiment, the video file or files are posted via the Internet, and/or the World Wide Web, and can posted to a Web Page, a Web site, and/or any other network device. The posting operation is performed by utilizing any suitable posting software. The video image file or video file can also be stored on a compact disk, a digital video disk and/or any other appropriate storage medium.

At step 309, the computer 120 or other hosting computer

generates or writes a file or script, such as an ASCII file which calls the video to stream or to download. This results in video which will stream or "streaming" video for a full screen application which will be characterized by a good clarity and quality. At step 309, the video file can then be transmitted to a client computer (not shown). At step 309, a separate file or script, such as an ASCII file is written and saved to an appropriately formatted file, such as an *.RPM file, or other suitable file format, which will call the original video file. This script can be typically included in any suitable code, such as an HTML code.

In the case of MPEG videos, Steps 301 through 303 are followed as described above. At step 304, however, the video file is converted, if not previously converted, to an MPEG format. Thereafter, the video is inserted into the appropriate file which may contain suitable coding, such as HTML codes. Thereafter, the file can be sized to any of herein-described resolutions. Thereafter, the video file is uploaded to the hosting computer, if utilized. Thereafter, the MPEG file is played from the computer 120 or the hosting computer, the Web page, and/or the Web site, depending upon the application, by first downloading a small portion of the file and by playing the file through a suitable device such as a player which supports any suitable video formats, such as AVI, MPEG-type, etc., and/or

other suitable formats.

Thereafter, operation of the apparatus ceases at step 310.

The processing steps described herein provide for the production of video images and/or video files which have enhanced resolution and which can be easily and effectively managed in applications involving the display of same, the posting of same, to a host computer, a Web server, a Web site, a Web page, a computer display, a full screen projection display and/or a video presentation and/or playback of same, respectively. Further, the method of the present invention provides for image processing, including various image and/or file processing techniques, which may or may not include image compression and/or encoding operations.

The apparatus and method of the present invention provides video images and/or files which have enhanced resolution and quality while requiring less file management efforts.

The resulting video images and/or files, and any accompanying audio files, which are obtained via the apparatus and method of the present invention are characterized by a high definition resolution and are suitable for high definition television, Web television, and large, full screen, panoramic

Internet applications, including video playback and/or video transmission, which preserving resolution upon image and/or video file magnification or reduction. The present invention also facilitates high speed file transfers of high resolution video images and/or video files, and any accompanying audio files, thereby dispensing with the need to engage in long and slow conventional file downloads and/or file transfers.

The apparatus and method of the present invention can also be utilized in conjunction with three-dimensional images and video files in order to produce high resolution, three-dimensional video images and/or video files.

The present invention preserves image integrity from the point of capture of the image through, and including, any final compression or compressions of same.

The resulting video images and/or files, and any accompanying audio files, which are obtained via the apparatus and method of the present invention, can be utilized, in any and/or all of the embodiments described herein, in conjunction with data and/or information which can be provided by any other and/or any external information source. The data and/or information may contain, but is not limited to, data and/or information of and for sound and/or audio files, text files,

video files, image files, and/or graphics files, and/or any other information source, data, information and/or file, which can be, and/or which may be linked to or with, and/or which can be operated and/or utilized in conjunction with, any video and/or image data and/or information. For example, any image and/or video data, information, or file, obtained via the present invention, can be utilized in conjunction with any sound file, audio file, text file, video file, image file, and/or graphics file, and/or any other data, information and/or file utilized in a multimedia environment, thereby providing for the utilization of enhanced images and/or video in conjunction with the respective file.

As noted above, the present invention provides for the processing, production and/or transmission of streaming video which can be transmitted on, or over, a communication network, the Internet, the World Wide Web, and/or any other communication network and/or medium. The streaming video obtained and/or transmitted via the present invention can provide for a video transmission which, once commenced, need not be stopped. The streaming video which is facilitated via the present invention can be played on demand while maintaining its streaming video nature.

While the present invention has been described and

illustrated in various preferred embodiments, such descriptions are merely illustrative of the present invention and are not to be construed to be limitations thereof. In this regard, the present invention encompasses any and all modifications, variations, and/or alternate embodiments, with the scope of the present invention being limited only by the claims which follow.

CLAIMS

What Is Claimed Is:

1. An apparatus for producing a digital image, comprising:

a device for generating a digital signal file from an image; and

a processor for processing said digital signal file and for generating an image file,

wherein said processor generates a first signal file from said digital signal file, and further wherein said processor processes said first signal file and generates said image file.

2. The apparatus of claim 1, further comprising:

one of a camera and a recording device for obtaining one of a photographic representation of an image, a film image, a negative image and a digital image.

3. The apparatus of claim 2, further comprising:

a developing device for developing one of said photographic representation of an image, a film image and a negative image.

4. The apparatus of claim 3, further comprising:

an enlarging device for enlarging said image.

5. The apparatus of claim 4, further comprising:

a scanning device for generating said digital signal file from said one of photographic representation of an image, a film image and a negative image.

6. The apparatus of claim 1, further comprising:

a video capture device for one capturing and processing said digital signal file.

7. The apparatus of claim 1, wherein said first signal file is an image file.

8. An apparatus for producing a digital image, comprising:

means for generating a digital signal file from an image file; and

means for processing said digital signal file and for generating an image file,

wherein said processing means generates a first signal file from said digital signal file, and further wherein said processing means processes said first signal file and generates said image file.

9. The apparatus of claim 8, further comprising:

means for obtaining said one of a photographic representation of an image, a film image, a negative image and a digital image.

10. The apparatus of claim 8, further comprising:

means for developing said one of photographic representation of an image, a film image and a negative image.

11. The apparatus of claim 8, further comprising:

means for enlarging said image.

12. The apparatus of claim 8, further comprising:

means for generating said digital signal file from said image.

13. The apparatus of claim 8, further comprising:

means for one of capturing and processing said digital signal file.

14. A method for producing a digital image, comprising:

generating a digital signal file from an image;

processing said digital signal file; and

generating an image file, wherein said processing operation further comprises:

generating a first signal file from said digital signal file; and

processing said first signal file and generating said image file.

15. The method of claim 14, further comprising:

obtaining one of a photographic representation of an image, a film image, a negative image and a digital image.

16. The method of claim 14, further comprising:

developing said one of photographic representation of an image, a film image, and a negative image; and

generating said image.

17. The method of claim 14, further comprising:

enlarging said image.

19. The method of claim 14, further comprising:

generating said digital signal file from said image.

20. The method of claim 14, further comprising:

one of capturing and processing said digital signal file.

21. The apparatus of any one of claims 1 to 13, wherein said

image file is utilized in conjunction with at least one of a sound file, an audio file, a text file, a video file, an image file, and a graphics file.

22. The method of any one of claims 14 to 20, wherein said image file is utilized in conjunction with at least one of an audio file, a text file, a video file, an image file, and a graphics file.

23. An apparatus for producing a streaming video file, comprising:

a device for generating a digital signal file from a first video file; and

a processor for processing said digital signal file and for generating a second video file,

wherein said processor generates a first signal file from said digital signal file, and further wherein said processor processes said first signal file and generates said second video file, and further wherein said second video file is a streaming video file.

24. The apparatus of claim 23, further comprising:

one of a camera and a recording device for obtaining one of a photographic representation of an image, a film image, a negative image, a digital image, a video file, and a motion

picture.

25. The apparatus of claim 24, further comprising:

a developing device for developing one of said photographic representation of an image, a film image and a negative image, a digital image, a video file, and a motion picture.

26. The apparatus of claim 25, further comprising:

an enlarging device for enlarging said photographic representation of an image, a film image, a negative image, a digital image, a video file, and a motion picture video file.

27. The apparatus of claim 24, further comprising:

a scanning device for generating said digital signal file from said one of photographic representation of an image, a film image, a negative image photographic representation of an image, a film image and a negative image, a digital image, a video file, and a motion picture.

28. The apparatus of claim 23, further comprising:

a video capture device for one capturing and processing at least one of said video file and said digital signal file.

29. The apparatus of claim 23, wherein said first signal file is

a video image file.

30. The apparatus of claim 23, wherein said streaming video file is one of posted to a host computer and stored on a storage medium.

31. The apparatus of claim 30, wherein said storage medium is at least on of a compact disk, a digital video disk, a floppy disk, and solid state device.

32. The apparatus of claim 23, wherein said streaming video file can be transmitted at least one of on demand and continuously.

33. An apparatus for producing a streaming video file, comprising:

means for generating a digital signal file from a first video file; and

means for processing said digital signal file and for generating a second video file,

wherein said processing means generates a first signal file from said digital signal file, and further wherein said processing means processes said first signal file and generates said second video file, and further wherein said second video file is a streaming video file.

34. The apparatus of claim 33, further comprising:

means for obtaining one of a photographic representation of an image, a film image, a negative image, a digital image, a video file, and a motion picture.

35. The apparatus of claim 34, further comprising:

means for developing one of said photographic representation of an image, a film image and a negative image, a digital image, a video file, and a motion picture.

36. The apparatus of claim 35, further comprising:

means for enlarging said photographic representation of an image, a film image, a negative image, a digital image, a video file, and a motion picture video file.

37. The apparatus of claim 33, further comprising:

means for generating said digital signal file from said one of photographic representation of an image, a film image, a negative image photographic representation of an image, a film image and a negative image, a digital image, a video file, and a motion picture.

38. The apparatus of claim 33, further comprising:

means for one capturing and processing at least one of said video file and said digital signal file.

39. The apparatus of claim 33, wherein said first signal file is a video image file.

40. The apparatus of claim 33, wherein said streaming video file is one of posted to a host computer and stored on a storage medium.

41. The apparatus of claim 40, wherein said storage medium is at least on of a compact disk, a digital video disk, a floppy disk, and solid state device.

42. The apparatus of claim 33, wherein said streaming video file can be transmitted at least one of on demand and continuously.

43. A method for producing a streaming video file, comprising:

generating a digital signal file from a first video file; and

processing said digital signal file and generating a second video file,

wherein said first signal file is generated from said digital signal file, and further wherein said first signal file is utilized to generate said second video file, and further wherein said second video file is a streaming video file.

44. The method of claim 43, further comprising:

obtaining one of a photographic representation of an image, a film image, a negative image, a digital image, a video file, and a motion picture.

45. The method of claim 44, further comprising:

developing one of said photographic representation of an image, a film image and a negative image, a digital image, a video file, and a motion picture.

46. The method of claim 45, further comprising:

enlarging said photographic representation of an image, a film image, a negative image, a digital image, a video file, and a motion picture video file.

47. The method of claim 43, further comprising:

generating said digital signal file from said one of photographic representation of an image, a film image, a negative image photographic representation of an image, a film image and a negative image, a digital image, a video file, and a motion picture.

48. The method of claim 43, further comprising:

one capturing and processing at least one of said video file and said digital signal file.

49. The method of claim 43, wherein said first signal file is a video image file.

50. The method of claim 43, wherein said streaming video file is one of posted to a host computer and stored on a storage medium.

51. The method of claim 50, wherein said storage medium is at least on of a compact disk, a digital video disk, a floppy disk, and solid state device.

52. The apparatus of claim 43, wherein said streaming video file can be transmitted at least one of on demand and continuously.

ABSTRACT OF THE DISCLOSURE

An apparatus and method for producing a digital image, including a device for generating a digital signal file from an image and a processor for processing said digital signal file and for generating an image file. The processor generates a first signal file from the digital signal file. The processor processes the first signal file and generates the image file. An apparatus for producing a streaming video file, including a device for generating a digital signal file from a first video file and a processor for processing the digital signal file and for generating a second video file. The processor generates a first signal file from the digital signal file. The processor processes the first signal file and generates the second video, wherein the second video file is a streaming video file.

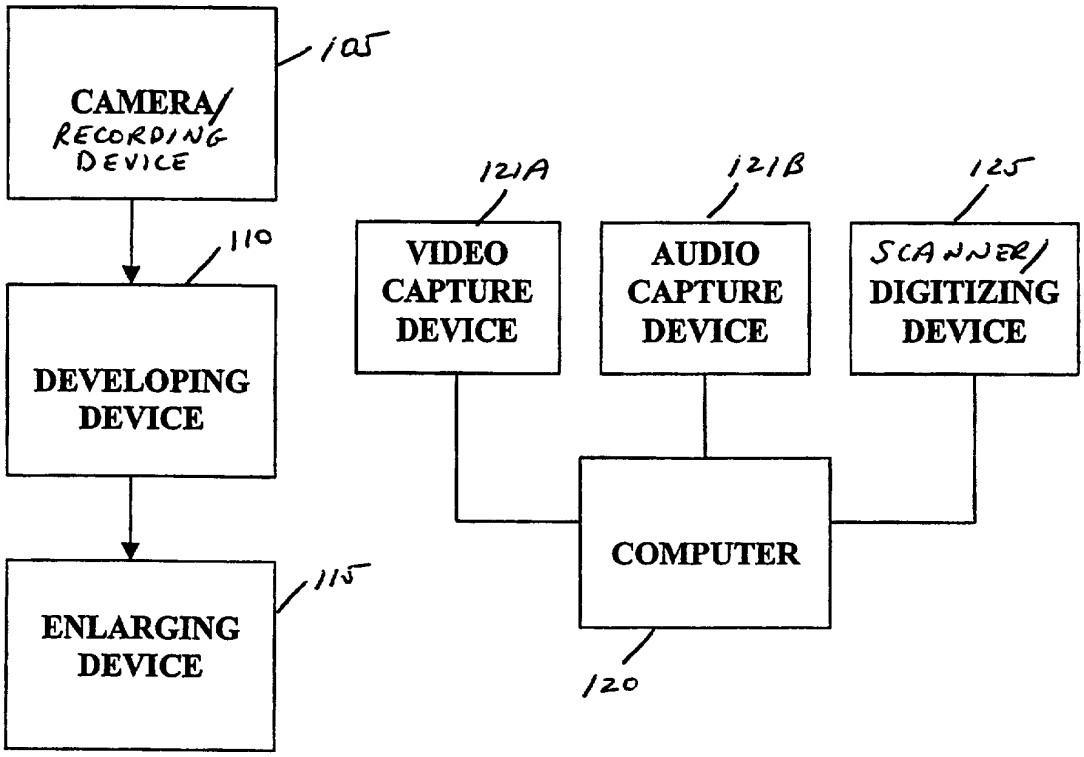

CAMERA/ RECORDING DEVICE
105
DEVELOPING DEVICE
110
ENLARGING DEVICE
115
VIDEO CAPTURE DEVICE
121A
AUDIO CAPTURE DEVICE
121B
SCANNER/ DIGITIZING DEVICE
125
COMPUTER
120
100

FIG. 1

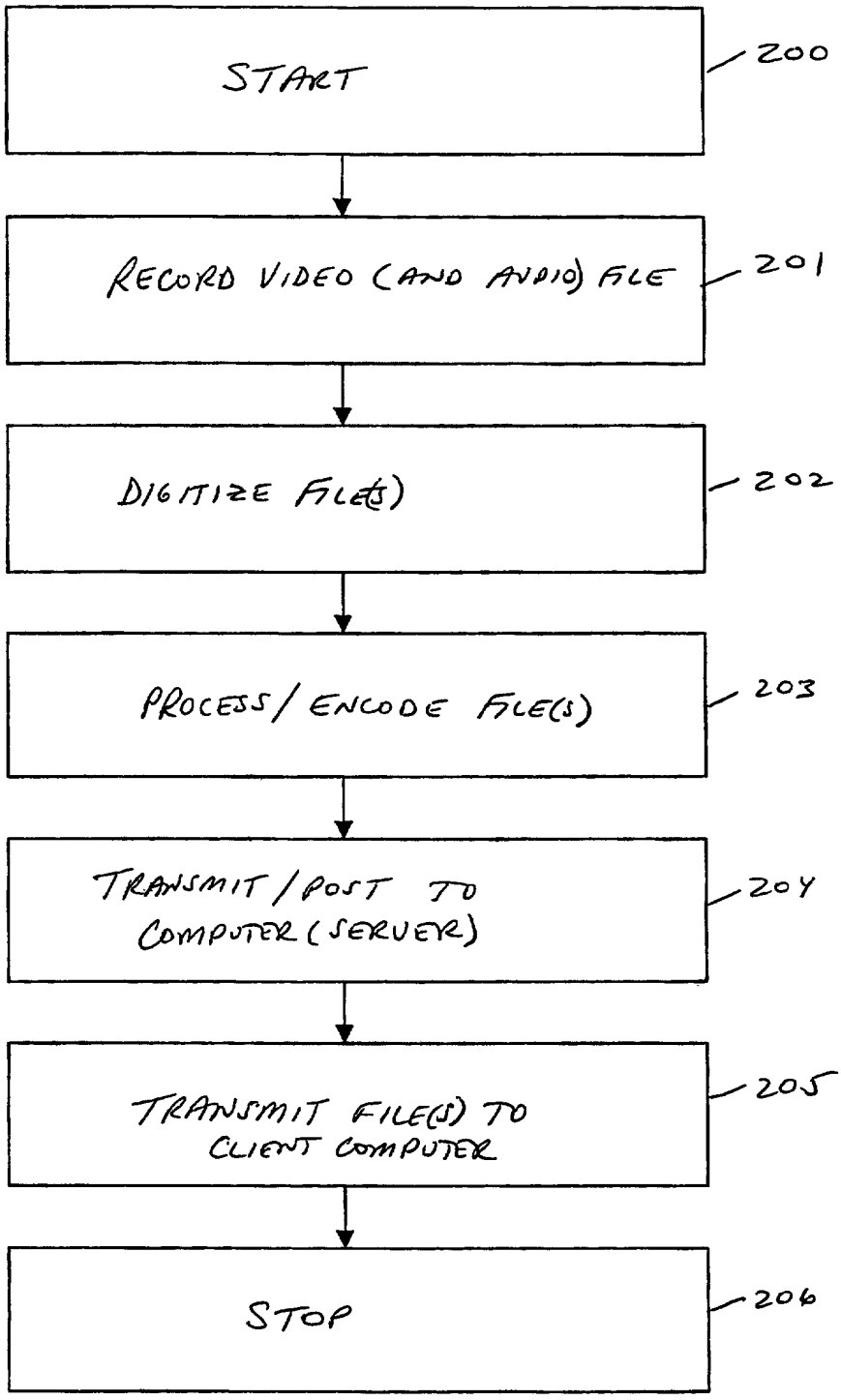

START
200
RECORD VIDEO (AND AUDIO) FILE
201
DIGITIZE FILE(S)
202
PROCESS / ENCODE FILE(S)
203
TRANSMIT / POST TO COMPUTER (SERVER)
204
TRANSMIT FILE(S) TO CLIENT COMPUTER
205
STOP
206

FIG. 2

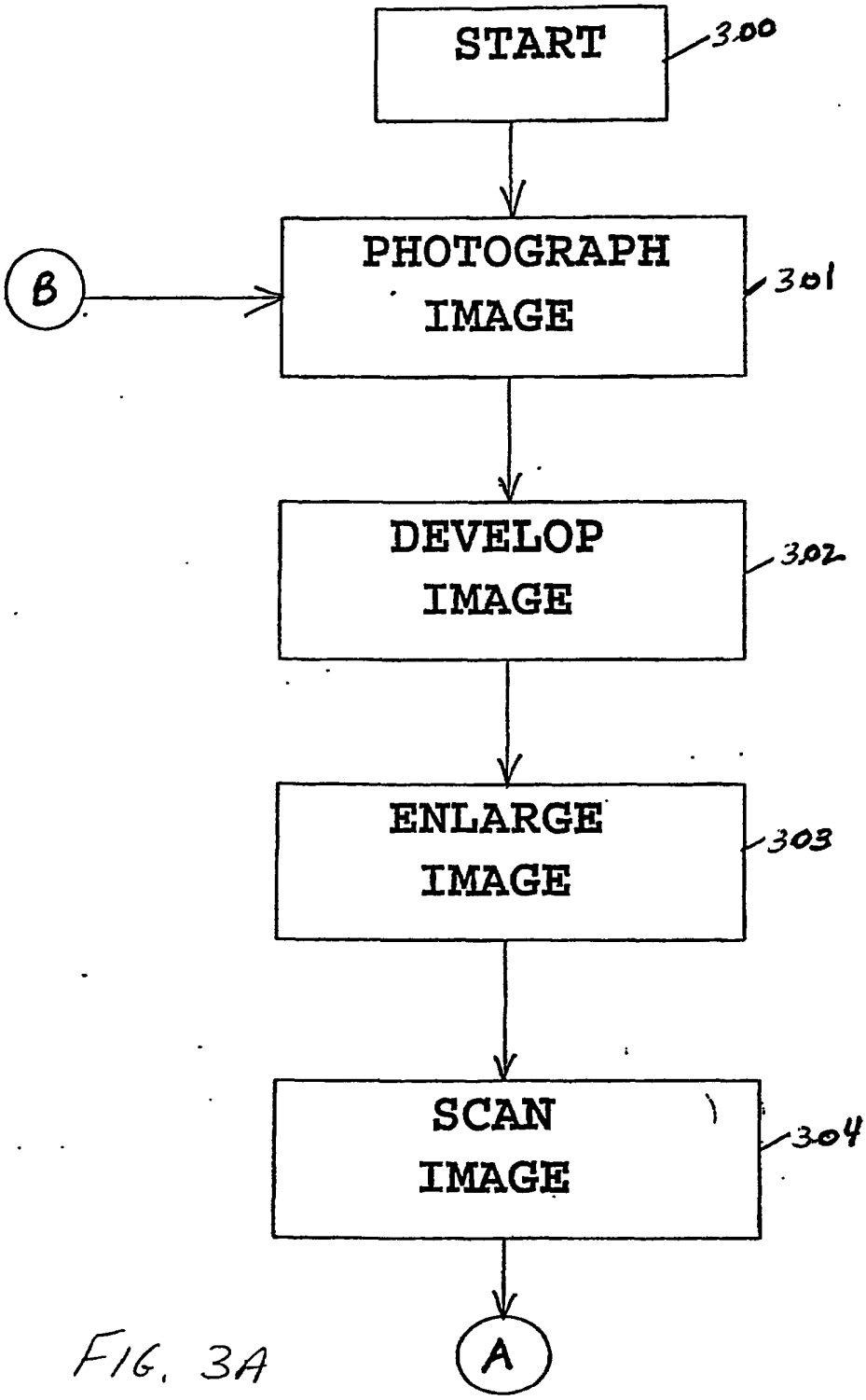

START
300
PHOTOGRAPH IMAGE
301
B
DEVELOP IMAGE
302
ENLARGE IMAGE
303
SCAN IMAGE
304
A

FIG. 3A

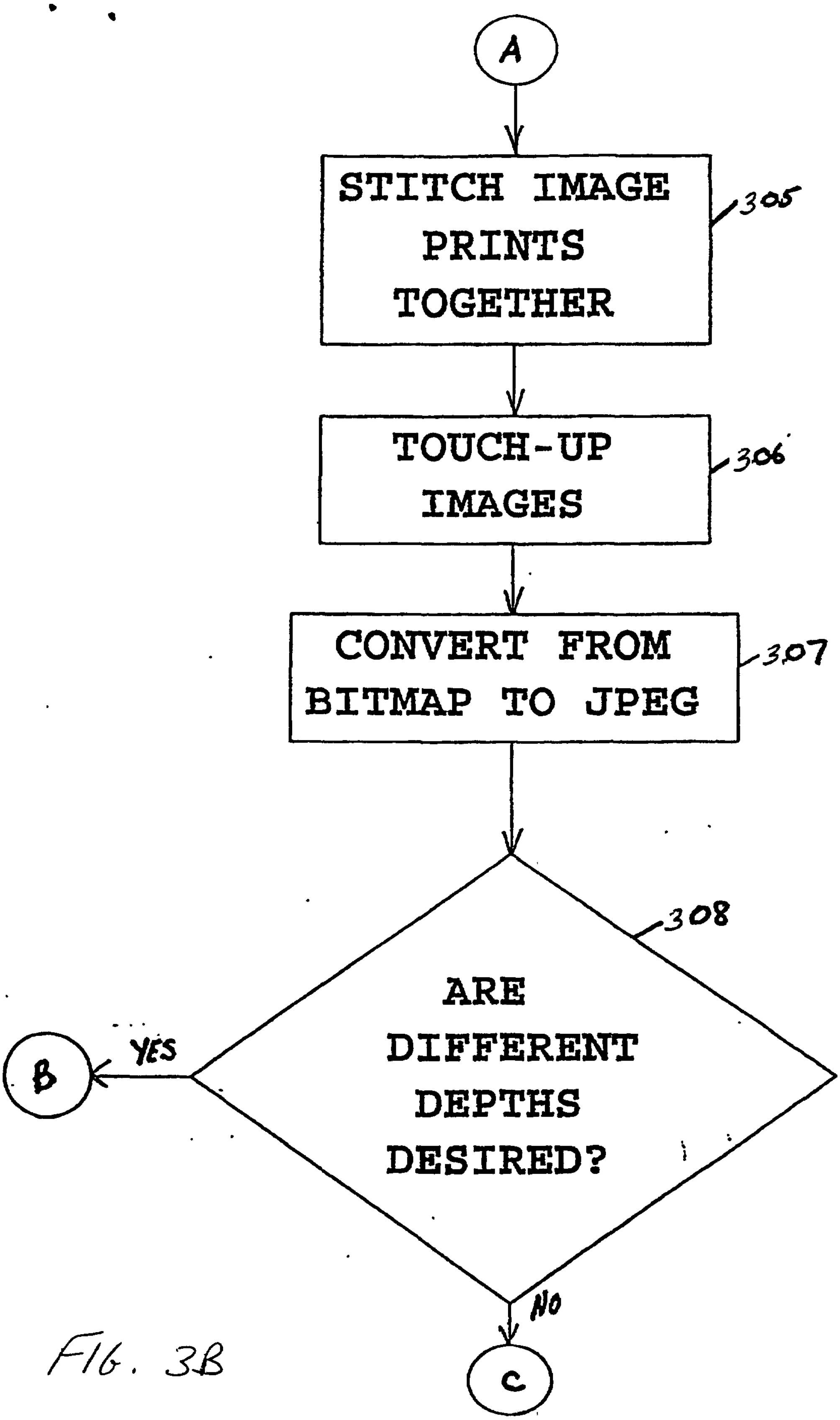

A
STITCH IMAGE PRINTS TOGETHER
305
TOUCH-UP IMAGES
306
CONVERT FROM BITMAP TO JPEG
307
ARE DIFFERENT DEPTHS DESIRED?
308
YES
B
NO
C

FIG. 3B

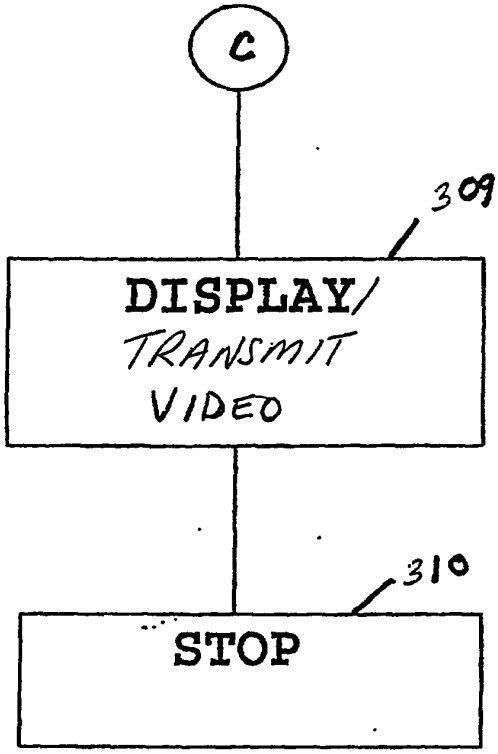
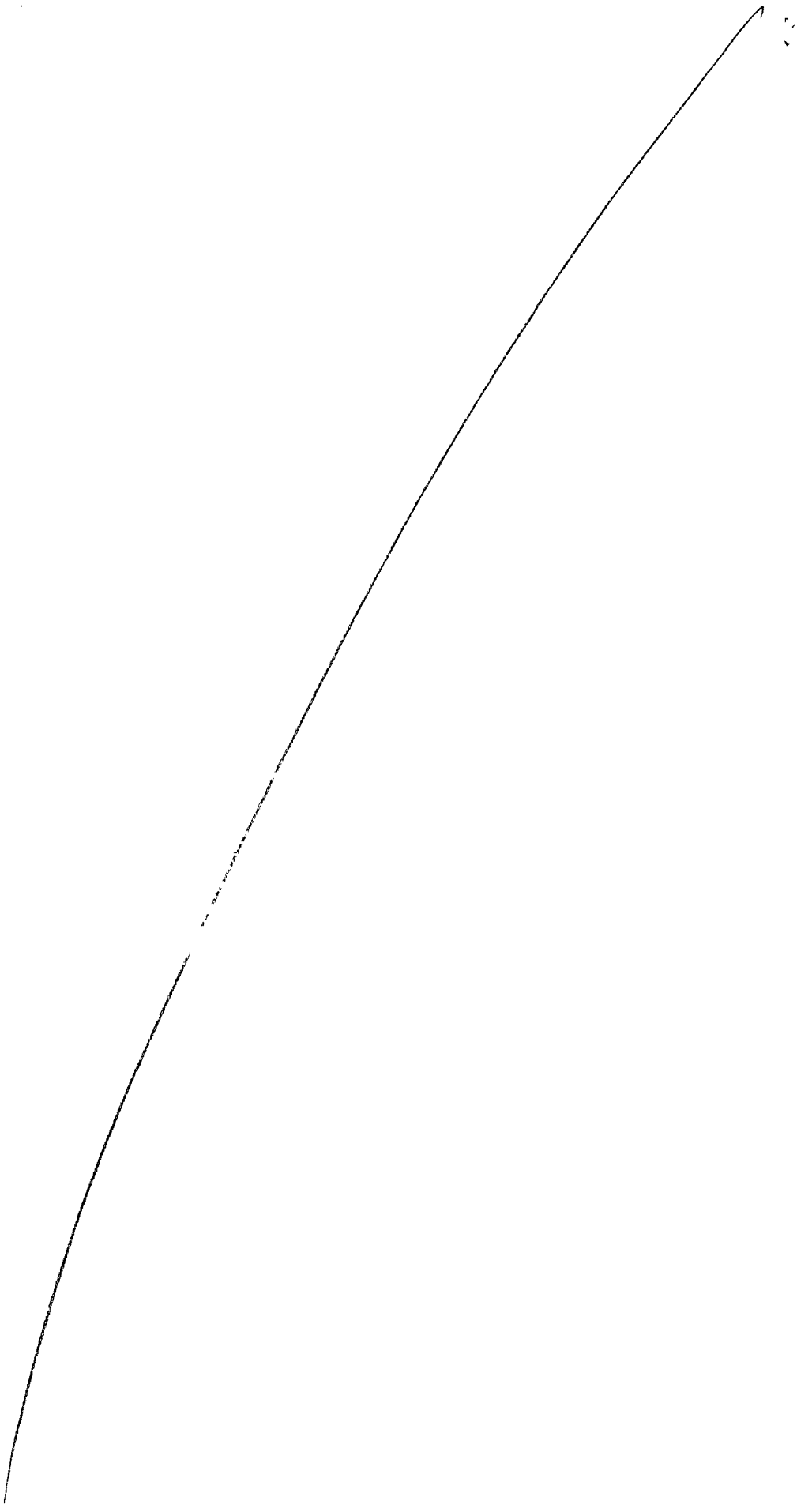


FIG. 3C



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Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire
IVIEWIT HOLDINGS, INC.

ENTRY INTO THE EUROPEAN PHASE BEFORE THE EUROPEAN PATENT OFFICE

NOTE: These notes describes the procedural steps required for entry into the European phase before the European Patent Office (EPO). You are advised to read them carefully; failure to take the necessary action in time can lead to your application being deemed withdrawn.

1. European patent application no. 00944619.6 has been allotted to the above-mentioned international patent application.

2. Applicants WITHOUT a residence or their principal place of of business within the territory of an EPC Contracting State may themselves initiate European processing of their international application, provided they do so before expiry of the 21st or 31st month from the the priority date (see also point 7 below).

   During the European phase before the EPO as designated or elected Office, however, such applicants must be represented by a pro-professional representative (Articles 133(2) and 134(7) EPC).

   Procedural acts performed after expiry of the 21st or 31st month by a professional representative who acted during the international phase but is not authorised to act before the EPO have no legal effect and therefore lead to loss of rights.

   Please note that a professional representative authorised to act before the EPO and who acted for the applicant during the international phase does not automatically become the representative for the European phase. Applicants therefore strongly advised to appoint in good time any representative they wish to initiate the European phase for them; otherwise, the EPO has to send all communications direct to the applicant.

3. Applicants WITH a residence or their principal place of business within the territory of an EPC Contractin State are not obliged to appoint a professional representative authorised to act before the EPO for the European phase before the EPO as a designated or elected Office.
However, in view of the complexity of the procedure it is recommended that they do so.

4. Applicants and professional representatives are strongly advised to initiate the European phase using EPO Form 1200 (available free of charge from the EPO). This however is not compulsory.

5. TO ENTER THE EUROPEAN PHASE BEFORE THE EPO, the following acts must be performed. (NB: Failure validly to do so will entail loss of rights or other adverse legal consequences).

   5.1 If the EPO acting as DESIGNATED OFFICE under Article 22(1) PCT, applicants must, within 21 months from the date of filing or (where applicable) the earliest priority date:

   a) Supply a translation of the international application into an EPO official language, if the International Bureau did not publish the application in such a language (Article 22(1) PCT and Rule 107(1)a) EPC).
   If the translation is not filed in due time, the international application is deemed to be withdrawn before the EPO (Article 24(1)(iii) PCT).

   b) Pay the national basic fee and, where a supplementary European search report has to be drawn up, the search fee (Rule 107(1)c) and e) EPC).

   c) Within six months from publication of the international search report, pay a designation fee for each designated Contracting State (Rule 107(1)d) EPC), and file a written request for examination and pay the examination fee (Rule 107(1)f) EPC).

5.2 If the EPO is acting as ELECTED OFFICE under Article 39(1)a) PCT, applicants must, within 31 months from the date of filing or (where applicable) the earliest priority date:

a) File a translation as per 5.1 a) above.

b) Pay the fees as per 5.1 b) above.

c) If the time limit under Article 79(2) EPC expires before the 31-month time limit, pay the designation fee for each designated Contracting State (Rule 107(1)d) EPC).

d) If the time limit under Article 94(2) EPC expires before the 31-month time limit, file the written request for examination A N D pay the examination fee (Rule 107(1)f) EPC).

e) Pay the renewal fee for the third year, if it falls due before the expiry of the 21-month time limit (Rule 107(1)g) EPC)

5.3 If the application documents on which the European grant procedure is to be based comprise more then ten claims, a claims fee is payable within the time limit under Rule 107(1) EPC for the eleventh and each subsequent claim (Rule 110(1) EPC). The fee can however still be paid within a period of grace of one month from notification of an EPO communication (Rule 110(2) EPC).

6. If the necessary fees are not paid in time, they may still be validly paid within a period of grace of one month from notification of an EPO communication, subject to payment at the same time of a surcharge for each late-paid fee (Rule 85a(1), 85b EPC).
For the renewal fee, the period of grace is six months from the fee's due date (Article 86(2) EPC).

7. If the applicant had a representative during the application's international phase, the present notes will be sent to the representative, asking him to inform the applicant accordingly.

All subsequent communications will be sent to the applicant, or - if the EPO is informed of his appointment in time - to the applicants's European representative.

8. For more details about time limits and procedural acts before the EPO as designated and elected Office, see the EPO brochure

How to get a European patent
Guide for applicants - Part 2
PCT procedure before the EPO - "EURO-PCT"

This brochure, the list of professional representatives before the EPO, Form 1200 and the latest fees are all on the internet under

http://www.european-patent-office.org.

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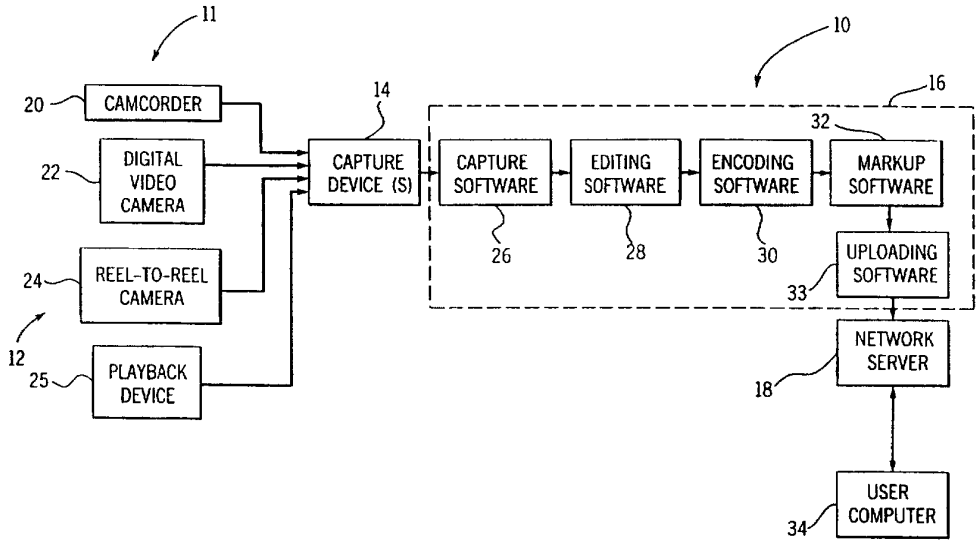
Published:
— *With international search report.*

[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR PROVIDING AN ENHANCED DIGITAL VIDEO FILE



(57) Abstract: A system and method of providing a streaming video file includes providing digital video data having a capture frame size of at least 69,300 pixels per frame and converting the digital video data to a streaming video file having a converted frame size of at least 69,300 pixels per frame. According to another exemplary embodiment, a method of providing a streaming video file includes providing digital video data having a capture frame rate of at least 24 frames per second and converting the digital video data to a streaming video file having a converted frame rate of at least 24 frames per second.

WO 00/76218 A1

— *Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

TITLE OF THE INVENTION

SYSTEM AND METHOD FOR PROVIDING AN ENHANCED DIGITAL VIDEO FILE

CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims the benefit of U.S. Provisional Application No. 60/137,297, filed June 3, 1999, U.S. Provisional Application No. 60/155,404, filed September 22, 1999, and U.S. Provisional Application No. 60/169,559, filed December 8, 1999.

FIELD OF THE INVENTION

The present invention relates generally to video imaging. More specifically, the present invention relates to a system and method for providing high quality digital video files for streaming across a network.

BACKGROUND OF THE INVENTION

Streaming video is a technique by which video is played in real time as it is downloaded over the Internet, as opposed to storing it in a local file first. A video player decompresses and plays the data as it is transferred to a user computer over the World-Wide Web. Streaming video avoids the delay entailed in downloading an entire file and then playing it with a plug-in application. Streaming video requires a communications connection (e.g., a network, Internet, etc.) and a computer powerful enough to execute the decompression algorithm in real time.

In the field of streaming video, the primary design challenge is that the viewer desires perfect video quality over a

limited-bandwidth network. Perfect video quality requires an enormous amount of digital data. Today's networks are not capable of providing life-like, full motion, full screen streaming video.

It is known to capture video using a capture device, compress the resulting captured video, store the compressed video, and send the compressed video across the Internet. However, prior attempts have failed to produce high quality streaming video that can be transmitted over the Internet. For example, prior attempts at streaming video have been unable to produce full-screen, real video frame rate video at any acceptable quality.

Several teachings have emerged that attempt to improve the quality and decrease the file size of streaming video. One teaching in the art is to reduce the number of frames per second that are being encoded, from the 25 to 30 fps of standard television to 6 or 7 fps or less for streaming video. While this reduces the amount of data that is being sent, the video appears jittery and corresponding voice appears asynchronous with the jittery video. Another teaching in the art is to capture the video at a small frame size of 160 x 120 or less. The small frame size of 160 x 120 is the widely used standard in Internet streaming video. Further teachings are directed to reducing the amount of data that is provided prior to compressing to reduce the file size resulting from compression. Other teachings in the art have pointed toward compressing a digital video file as much as possible prior to transmission. Full-screen, full-motion video has historically been viewed as requiring far too much data for transmission over a limited-bandwidth network.

Accordingly, there is a need for an improved system and method for providing an enhanced digital video file for streaming across a network. Further, there is a need for a digital video file having high quality at various screen sizes with minimal quality loss when the video is expanded to full screen size. Further still, there is a need for a digital video file having a real video frame rate that can be streamed across a limited bandwidth network, such as the Internet. Further yet, there is a need for a video transmission which, once commenced, need not be stopped.

BRIEF SUMMARY OF THE INVENTION

According to an exemplary embodiment, a method of providing a streaming video file includes providing digital video data having a capture frame size of at least 69,300 pixels per frame and converting the digital video data to a streaming video file having a converted frame size of at least 69,300 pixels per frame.

According to another exemplary embodiment, a method of providing a streaming video file includes providing digital video data having a capture frame rate of at least 24 frames per second and converting the digital video data to a streaming video file having a converted frame rate of at least 24 frames per second.

According to yet another exemplary embodiment, a method of providing a streaming video file includes obtaining a source video signal having a predetermined source video parameter; capturing the source video signal while maintaining substantially the same source video parameter to provide a captured digital video file; and encoding the captured digital video file while maintaining substantially the same source video parameter to provide a streaming video file.

According to still another exemplary embodiment, a method of generating a streaming video file for streaming over the Internet includes providing digital video data having a capture frame size of at least 320 x 240 pixels; compressing the digital video; data; encoding the digital video data into a streaming video file, wherein the streaming video file has a frame size of at least 320 x 240 pixels; uploading the streaming video file to an Internet server.

According to still another exemplary embodiment, a system for providing a streaming video file includes means for providing digital video data having a capture frame size of at least 320 x 240 pixels and means for converting the digital video data to a streaming video file having a converted frame size of at least 320 x 240 pixels.

According to still another exemplary embodiment, a system for providing a streaming video file includes means for providing digital video data having a capture frame rate of at least 24 frames per second and means for converting the digital video data to a streaming video file having a converted frame rate of at least 24 frames per second.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will become more fully understood from the following detailed description, taken in conjunction with the accompanying drawings, wherein like reference numerals refer to like parts, in which:

FIG. 1 is a block diagram of a system for generating an enhanced digital video file according to an exemplary embodiment;

FIG. 2 is a flowchart of a method for generating an enhanced digital video file according to the exemplary embodiment of FIG. 1; and

FIG. 3 is a block diagram of a system for playing a digital video file across a network.

DETAILED DESCRIPTION OF THE INVENTION

Referring to FIG. 1, a system 10 for generating an enhanced digital video file is shown. System 10 may be used as shown, or portions of system 10 may be integrated with other video processing systems, such as medical imaging equipment, motion picture production equipment, etc. System 10 generates a digital video file expandable to a full screen size and having a real video frame rate (i.e., life-like, smooth, not jerky, comparable with recorded video formats, such as, NTSC (National Television Standards Committee) at 29.97 frames per second (fps), PAL (Phase Alternative Line) at 25 fps, and SECAM (Séquentiel Couleur Avec Mémoire) at 25 fps)) with a file size that is suitable for streaming over the Internet, for such uses as high definition television, Web television, computers and servers utilized in wireless environments, etc.

As known in the art, video is recorded having certain standard recorded video parameters, such as, frame rate, and number of lines scanned. For example, it is will known that a source conforming to the NTSC (National Television Standards Committee) standard operates at 29.97 frames per second (fps), a source conforming to the PAL (Phase Alternative Line) standard operates at 25 fps, and a source conforming to the SECAM (Séquentiel Couleur Avec Mémoire) standard operates at 25 fps. It is will known in the

art that the NTSC standard includes two interleaved frames at 240 lines scanned, while the PAL standard is 270 lines scanned. Note that the number of lines scanned corresponds to the number of vertical pixels in a standard 320 x 240 frame size compatible with standard capture cards, such as, a Dazzle LAV-1000S capture device manufactured by Dazzle, Inc. of Fremont, California.

System 10 includes one or more sources, including recording devices 12 or playback device 25, a capture device 14, a computer 16, and a network server 18. Recording devices 12 include a camcorder 20, a digital video camera 22, and a reel-to-reel camera 24, each of which may be hand-held or mounted on a tripod or stand. System 10 may include a playback device 25 (e.g., tape player, VHS (Vertical Helix Scan) player, Beta player, DVD (Digital Versatile Disk) player, etc.). Camcorder 20 may be a VHS recorder, Beta recorder, or other camcorder, and is configured to store video on magnetic tape. Digital video camera 22 may be any type of digital video camera configured to generate video in a digital format. In this exemplary embodiment, digital video camera 22 stores the digital video data to a tape. Digital video camera 22 is configured to provide digital video data in real time or via the tape in a digital format, such as, Beta digital, AVI, MOV, MPEG (Motion Picture Experts Group), or other format compatible with the IEEE 1394 standard, etc., to capture device 14. AVI is an audio/video standard designed by Microsoft Corp., Redmond, Washington. According to one exemplary embodiment, a digital video camera including 3CCD technology is used to record the video. The 3CCD technology (3-chip charge-coupled device) includes a dichroic prism and three CCDs, each CCD being aligned to detect only the red, green, or blue color. A 3CCD camera will provide enhanced color resolution. Reel-

to-reel camera 24 includes recording equipment that uses magnetic tape which must be threaded through the equipment and onto an empty reel. According to one alternative embodiment, a separate audio recording device, such as a microphone, may be utilized in conjunction with recording devices 12, in which embodiment recording devices 12 are used to record only video. Other recording devices may be used, such as, devices optimized for live video-conferencing.

Computer 16 includes a processor, memory, magnetic storage device, input/output devices and circuitry, etc. Computer 16 may include multiple computer at multiple sites, with different portions of the process described hereinafter operating on different computers.

Capture device 14 is coupled to one or more of sources 11. Capture device 14 is shown external to computer 16, but may alternatively be an internal capture device coupled within the housing of computer 16 or an internal capture device within the housing of one of recording devices 12 or playback device 25. In this exemplary embodiment, a Dazzle LAV-1000S capture device is utilized, though other capture devices may be used, such as a Pinnacle DC10PLUS or Pinnacle DC30PRO device, both manufactured by Pinnacle Systems, Inc., Mountain View, California, or a MotoDV Mobile capture device, manufactured by Digital Origin, Inc., Mountain View, California. Capture software 26, such as Amigo 2.11, manufactured by Dazzle, Inc. or Adobe Premier 5.1, manufactured by Adobe Systems Inc., San Jose, California, is operable on computer 16 to interface capture device 14 with computer 16. Other capture software may be utilized, such as,

RealProducer G2, manufactured by RealNetworks, Inc., Seattle, Washington.

In conjunction with capture software 26, capture device 14 is configured to receive a video signal from one of recording devices 12 or playback device 25, to digitize the video signal, and to store the video signal as a digital video file. The parameters of the video capture will be discussed below with reference to FIG. 2. The digital video file is an MPEG-1 file in this exemplary embodiment, but may alternatively be generated in other digital video formats, such as, MPEG-2, AVI, etc. Capture device 14 is a combined audio/video capture device, but may alternatively include discrete audio and video capture devices, the audio capture device configured to digitize any audio which corresponds to the video being captured by the video capture device. As a further alternative, audio captured device may be utilized alone without a video capture device. The audio capture device may be, for example, a Montego II device, manufactured by Voyetra Turtle Beach, Inc., Yonkers, New York, and configured to generate a digital audio file in a digital audio format, such as, PCM (Pulse Code Modulation).

Editing software 28 is operable on computer 16. In this exemplary embodiment, Adobe Premier 5.1 is utilized, though other video editing software may be used. Editing software 28 receives the captured digital video file and enables an operator to edit the digital video file by adding or deleting frames, adjusting the color, contrast, and brightness of the frames, etc. The edits are then saved to the digital video file or can be exported to AVI or MOV file types.

Encoding software 30 is operable on computer 16. In this exemplary embodiment, RealProducer G2 is utilized, though

other encoding software may be used. Encoding software 30 receives the edited digital video file and encodes the digital video file into an encoded format, such as, an RM format. Encoding software 30 may also compress the digital video file, if needed, to reduce the size of the digital video file, using a video compression algorithm, such as MPEG-1, MPEG-4, etc.

Markup software 32 is operable on computer 16. In this exemplary embodiment, a hypertext markup language (e.g., HTML, Dynamic HTML, Cold Fusion) is utilized. An operator marks up the encoded digital video file in HTML to prepare the digital video file for uploading to the network server 18. In this exemplary embodiment, a code segment representing a full screen frame size, such as 640 x 480 pixels, is associated with the digital video file in the HTML code. The full screen frame size code segment may alternatively include other screen sizes, such as 800 x 600 pixels, 1024 x 768 pixels, 1280 x 1024 pixels, and 1600 x 1200 pixels. During a subsequent video streaming step, the full screen frame size code segment causes or enables a video player program, such as RealPlayer, manufactured by RealNetworks, Inc., to enlarge the streaming video to a full screen frame size, such as 640 x 480 pixels.

References herein to frame sizes in pixels, such as, 320 x 240 pixels, 640 x 480 pixels, are intended to include equivalent frames sizes thereto. For example, it is known that a frame size of 320 x 240 pixels may include an additional number of unneeded pixels (e.g., which can be as much as 10% of the total pixels) attributed to overscan. Thus, one equivalent to a 320 x 240 pixel frame size is 304 x 228 pixels. As a second example, when rectangular pixels are used, the exact pixel count differs from the

stated frame size. Thus, one equivalent to a 320 x 240 pixel frame size is 352 x 240. Accordingly, references to frame sizes in pixels are intended to included these and other equivalent frame sizes, and the teachings herein include any and all such insubstantial variations.

The uploading process utilizes uploading software 33, such as, a Web FTP (file transfer protocol) software (e.g., WS FTP PRO, manufactured by Ipswitch, Inc., Lexington, Massachusetts.) The digital video file is uploaded to network server 18, which includes a computer configured to generate a web page on an internet-protocol network, such as the Internet or a company-wide intranet. A web page is a block of data written in a markup language, such as HTML, and any related files for scripts and graphics. Network server 18 may alternatively be coupled to a non-internet-protocol network, such as, an ethernet, a local area network, a wide area network, a wireless network, etc.

A user computer 34 may access the web page provided by network server 18 via a network, such as, the Internet. Upon actuating a user input device (e.g., a web page button, hypertext link, etc.) associated with the uploaded digital video file, the HTML code launches a suitable video player program (e.g., RealPlayer) at user computer 34, activates the full screen frame size at user computer 34, and streams the video from the digital video file to user computer 34. Alternatively, the video player program may initially play the streaming video at a smaller frame size (e.g., 320 x 240), and the user may actuate a user input device on the video player to enlarge the streaming video to a full-screen size, such as 640 x 480. Notably, capture software 26, editing software 28, encoding software 30, markup software 32, and uploading software

33 may be operable on one computer or on different computers during different steps in the process.

According to one alternative embodiment, the encoded digital video file is stored directly to a storage device, such as, a compact disk, a digital video disk, a magnetic storage device, etc., for subsequent viewing on another computer, on a personal digital assistant (e.g., a Palm Pilot manufactured by Palm, Inc., Santa Clara, California), etc. According to another alternative embodiment, digital video data is provided on a storage device (e.g., a floppy disk, a hard disk storage, etc.) which has been pre-captured. The pre-captured digital video data is provided in a compressed or uncompressed digital video format to encoding software 30 for subsequent processing.

Referring now to FIG. 2, a method 50 for generating an enhanced digital video file according to the exemplary embodiment of FIG. 1 is shown. Method 50 is operable using one or more of the elements of system 10, as needed. While the steps of method 50 are explained with reference to captured video, it is understood that captured audio may be processed along with the captured video, or perhaps processed independently in a similar manner. As will be seen, the recorded video will be captured and encoded at near-optimal levels, as determined by the selected parameters in these processes, thereby preserving the highest quality video content. While exemplary values are presented herein for such parameters, it is understood that one of ordinary skill in the art will recognize other combinations of parameters based on these teachings.

According to one exemplary embodiment, a customer provides pre-recorded video saved to a disk or other storage device. At step 52, if the video has been pre-recorded by the customer, the

method proceeds to step 58. If the video has not yet been recorded, at step 54, video is recorded using one or more of recording devices 12 or playback device 25. The video is recorded into any suitable format, such as, VHS or Beta, and is played back using a television standard, such as, NTSC (National Television Standards Committee), PAL (Phase Alternative Line), SECAM (Séquentiel Couleur Avec Mémoire), a digital format, such as, AVI, MOV, MPEG, a digital format compatible with the IEEE 1394 standard, or another format, etc. At step 56, the video is captured by coupling one of recording devices 12 or playback device 25 to capture device 14, which is an external Dazzle LAV-1000 capture device in this exemplary embodiment, but may alternatively be an internal card or other capture devices, such as a Pinnacle DC10 device.

Capture software is also utilized, such as, Amigo 2.11, Adobe Premier 5.1 or Real Producer G2. Capture device 14 and capture software 26 generate a digital video file based on the recorded video. If the recorded video is in an analog format, capture device 14 digitizes the analog video to create digital video data. If the recorded video is in a digital format, capture device 14 merely receives the digital video data and formats a file in the appropriate standard (e.g., AVI, MOV, MPEG1, etc.). According to one exemplary embodiment, capture software 26 is set for real video capture, i.e., having a frame rate of a television or movie standard, such as, 29.97 frames per second. Real video capture may further have a frame rate of between 24 and 30 frames per second, or at least substantially more than the 6 to 9 frames per second conventionally used in streaming video applications. Further, the video is captured with at least approximately 76,800 pixels per frame (at least approximately 69,000 pixels taking into consideration

overscan). For a 4:3 aspect ratio, the frame size of the video capture is at least 320 x 240 in this exemplary embodiment (at least 304 x 228 taking into consideration overscan), or at least more than the 160 x 120 used in conventional streaming video applications. Frame sizes of 480 x 320 and 640 x 480 may also be utilized in the video capture. However, particularly advantageous results are associated with the 320 x 240 capture frame size.

In an alternative embodiment, a separate audio capture device is utilized in parallel with the video capture device. In the alternative embodiment, corresponding audio capture software is operable on computer 16 to digitize the audio into a digital audio format, such as PCM. The sampling rate is between 44 and 48 kiloHertz (kHz); the bus size is 16-bit, allowing an audio resolution of 16-bits; and the audio is sampled in stereo. These parameters may also be set using the video capture software in an embodiment wherein video and audio are captured using one capture device.

The captured video data may be stored as a data file in a storage device (e.g., a hard drive) or may be stored in memory and fed directly to an encoder. The captured video data may further be compressed, for example, to an MPEG-1 file before being saved to the storage device.

At step 58, the digital video file is edited using a video editing software, such as, Adobe Premier 5.1. Adobe Premier 5.1 generates an output file in a MOV or AVI format, but may alternatively generate an output file in any digital video format. The edited digital video file may be stored in the storage device. Step 58 is optional but, if included, preferably Adobe Premier 5.1 maintains a frame size of at least 320 x 240 pixels and a real video frame rate.

At step 60, the edited digital video file is converted or encoded using a video encoding algorithm to create a streaming video file. The edited digital video file is first retrieved from the storage device (unless the digital video data is provided directly from capture device 14). In this exemplary embodiment, the digital video file is encoded to a RealMedia format (i.e., RM) using a RealNetworks encoding algorithm. RM is an audiovisual file format proprietary to RealNetworks, Inc. As a further alternative, Windows Media Encoder, manufactured by Microsoft Corp., may be utilized to encode the captured digital video file, for example, to an ASF format (Advanced Streaming Format) or ASX format. Further still, QuickTime, manufactured by Apple Computer, Inc., Cupertino, California, may be utilized to encode the captured digital video file, for example, to an MOV format.

Encoding may additionally include compression, if a smaller file size is desirable, as indicated by steps 62 and 64. The amount of compression may be selected by the operator using encoding software 30 or alternative compression software. During the encoding process, the digital video file is encoded to have a data rate of between approximately 35 kbps (kilobits per second) to 750 kbps, and a frame rate of between approximately 24 fps (frames per second) and 30 fps (e.g. 29.97 fps.). The number of pixels per frame is set to at least approximately 76,800 (again, at least approximately 69,000 pixels taking into consideration overscan) which, for a 4:3 aspect ratio, is 320 x 240 pixels (again, at least 304 x 228 pixels taking into consideration overscan), or at least more than the 160 x 120 pixels of conventional usage. However, editing, encoding, and compression are optional steps.

At step 66, the digital video file is marked up with a markup language, such as, HTML. At step 68, a full screen frame size is associated with the digital video file. A full screen frame size is at least 640 x 480 pixels, and may also be 800 x 600 pixels, 1024 x 768 pixels, 1280 x 1024 pixels, 1600 x 1200 pixels, etc. In this exemplary embodiment, the markup language associated with the digital video file includes a code segment that causes the digital video file to stream at the desired full screen frame size. While the markup language is used to associate the full screen frame size code segment with the digital video file in this exemplary embodiment, the full screen frame size code segment may be associated with the digital video file in another step of the method, such as the encode step 60, compression step 62, or another step.

At step 70, the digital video file is uploaded to an Internet web page using uploading software, such as, WS FTP PRO. At step 72, a script (e.g., an ASCII file (American Standard Code for Information Interchange)) is associated with the marked-up digital video file. The script calls the video to stream in response to a user actuation from user computer 34. The script is written in a RAM format, such as from a Microsoft Notepad software program. The script is included in the markup language associated with the digital video file. In this exemplary embodiment, an actuatable user input device (e.g., a hypertext link) is associated with the HTML code.

Thus, a user from anywhere in the world may access network server 18 via the Internet, actuate the user input device, and call the video to stream. Upon actuation, the HTML codes launch video playing software (e.g., RealPlayer) at the user computer, enlarge the viewing window of the software to full screen mode (i.e., at least 640 x 480), and begin streaming the video to the

user computer. Alternatively, the user may expand the viewing screen to full screen mode by actuating an input device on the video player software. Other methods of expanding the viewing screen to a full screen are contemplated. The transmission speed of the digital video file is dependent upon the bandwidth of the user's network connection, but may range from approximately 35 kbps to 750 kbps, or as low as 28.8 kbps, with a frame rate of between approximately 24 fps to 29.97 or 30 fps.

According to one alternative embodiment, network server 18 is configured to query user computer 34 to ascertain the network connection used by computer 34 (e.g., 28.8 kbps modem, T1 line, ISDN, etc.). Thereafter, network server 18 determines the appropriate transmission rate based on the ascertained network connection.

EXAMPLE A

A Sony DCR VX-1000 digital video camera, having 3CCD technology, manufactured by Sony Electronics, Inc., Park Ridge, N.J., was utilized to record a video signal. The video camera generated an output signal of 6MHz in NTSC format.

A Dazzle LAV-1000S external capture device was coupled to the video camera. Amigo 2.11, Dazzle's capture software was used. The Dazzle capture device and capture software were programmed with several parameters. The frame size was left at the default setting of 320 x 240 pixels. The frame speed was set to 29.97 frames per second. The bit rate was set to 3.0 Megabits (Mb) per second. The audio capture was set to 44 kHz, 16 bit sampling rate. An MPEG-1 file was generated based on the video

signal using the capture device and software programmed with these parameters.

When the captured MPEG-1 file was provided to RealEncoder G2, the resulting encoded file failed to retain the real video frame rate. Therefore, Adobe Premier 5.1 was utilized to receive the MPEG-1 file and export it to a MOV or AVI or MPEG file., based on several parameters. The frame rate in Adobe Premier 5.1 was set to 29.97 fps. The frame size was set to 320 x 240. The "Quality" setting, representing the number of colors to appear in the edited file, was set to a high setting (e.g., 100%). Adobe Premier 5.1 generated an AVI file or an MOV file or a MPEG file, depending upon the operator selection.

RealEncoder G2 software was used to encode the AVI or MOV file into a streaming video file in RM format. The RealEncoder G2 software was programmed with several parameters. The bitrate was set to 220 kbps. The frame rate was set to 30 fps. The "Surestream" option was selected. "Surestream" technology adjusts the playing speed of the encoded digital video file to accommodate the network connection speed of the user. For sound quality, "stereo/music", the highest quality, was selected. For image quality, "sharpest image", the highest quality, was selected. Regarding frame size, this version of RealEncoder generated an output signal having a frame size equal to that of the frame size of the MOV or AVI input file. RealEncoder compressed the MOV or AVI input file using the RealNetworks compression algorithm. An RM file was generated based on the these parameters.

The RM file was uploaded to an Internet server. Using Microsoft Notepad, a script was written in RAM format to 1) identify the location of the RM file, 2) launch RealPlayer on the user

computer, 3) resize the viewing screen on the user computer to 640 x 480, and 4) begin the video stream. The result was unexpectedly high-quality, full-screen, real video frame rate, streaming video. The RM file was subsequently streamed to a client computer via a telephone modem and via other broadband connections. The same unexpectedly high-quality, full-screen, real video frame rate, streaming video was experienced. The streaming playback was intermittent due to the need to buffer to accommodate the lower bit-rate of transmission.

EXAMPLE B

According to another example, an NTSC analog signal is provided to a Pinnacle DC-10PLUS capture device. The Pinnacle capture device and associated software generate a digital video file in AVI format based on several parameters. The capture type is set to NTSC. The frame size is set to 320 x 240 pixels, or "1/4 full frame size". Brightness, sharpness, and color are adjusted, as desired. The compression rate is set to 2.5:1. The frame rate is set to 29.97. Square pixel ratio is selected. Audio is set to stereo format, 44 kHz, 16 bit sampling. The data rate is set to 1739 kbps. The capture device utilizes a Miro codec to create a digital video file in AVI format.

Optionally, a header and footer is provided to the beginning and end of the digital video file. The header and footer include a trademark for the assignee of the present application. Adobe Premier is used to render the header, footer, and watermark to the digital video file. A parameter within Adobe Premier is set to

a frame size of 320 x 240. Adobe Premier further utilizes a Miro codec to create a digital video file in AVI format.

The edited AVI file is encoded by RealProducer software. The following parameters are programmed in the RealProducer software. One set of parameters was used for a low-speed network connection at the user computer (hereinafter designated "LO"), and another set of parameters was used for a high-speed network connection at the user computer (hereinafter designated "HI"). RealNetworks "Surestream" technology is selected. Alternatively, "single-stream" can be selected, and an RAM file can be generated to query the connection speed of the user computer and stream the video at the proper connection speed. The encoding speed is set to, for LO, 28 kbps or 56 kbps, and for HI, LAN, DSL, Cable Modem, or T1. Sound quality is set to "voice only" or "stereo music" or "CD quality". Video quality is set to "sharper image". Frame rate is set to 29.97 fps. Target bit rate is set to 350 kbps. The target player is specified as RealPlayer G2. Frame size is set to 320 x 240. Based on these parameters, the RealEncoder software generates an RM file or other streaming video data file, which is subsequently uploaded to RealServer.

The exemplary embodiments disclosed herein provide greatly enhanced streaming video suitable for streaming over a limited-bandwidth network, such as the Internet. Several discoveries have enabled various aspects of this technology. The first discovery was that the efficiency of encoding from a captured digital video file to a streaming video file is increased with an increase in the frame size of the captured digital video file. Thus, while conventional teachings pointed toward minimizing the capturing and encoding

frame sizes (typically to 160 x 120 pixels, which has widely become an Internet standard for streaming video) to reduce the size of the resulting file, the present inventors turned away from these teachings and increased the capturing and encoding frame sizes to 320 x 240 pixels. Second, one goal of the present inventors was to achieve full-screen, real video frame rate, streaming video. Conventional teachings would point toward encoding at a frame size of 640 x 480 pixels to achieve full-screen streaming video. However, with today's technology, enlarging the frame size of a captured digital video file during encoding to 640 x 480 (for example, from 160 x 120 pixels) pixels causes an enormous increase in the amount of data in the resulting encoded digital video file and requires enormous bandwidth to stream. Therefore, the present inventors discovered that encoding at 320 x 240 pixels (or its equivalent) provided greatly improved results when doubled to full-screen for viewing.

These conventional teachings were evidenced in the capabilities of the encoder used at the time of invention, namely, RealProducer G2. RealProducer G2 taught away from real video streaming since digital video files that were captured at a real video frame rate (e.g., 30 fps) would be automatically reduced to a lower, non-real video frame rate (e.g., 15 fps) to reduce the size of the streaming video file. Furthermore, digital video files which were captured directly from a capture device using RealProducer G2 were encoded at a frame rate of only 6-7 fps and had no option to adjust frame size. Therefore, to obtain a real video frame rate, the inventors followed the steps in EXAMPLE A above to achieve the first high quality, full-screen, real frame rate streaming video file.

Referring now to FIG. 3, a system 80 for playing a digital video file across a network is shown, and a corresponding method is described. System 80 includes a network server 82 having a processor 84, a storage device 86, and a network interface 88. A capture device 90 is coupled to network server 82 and is configured to capture a video signal, as described hereinabove. Processor 84 controls capture device 90 and provides various parameters to capture device 90 regarding frame size, bit rate, etc. For example, one or more of the methods for capturing video and generating a digital video file described hereinabove may be implemented by processor 84, storage device 86, and capture device 90. Processor 84 and capture device 90 generate a digital video file in a digital video format (e.g., MPEG, AVI, etc.) and store it to storage device 86. As used in this description of FIG. 3, the term "storage device" includes such devices as magnetic tape, a hard drive, a floppy disk, magnetic disk, or other similar non-volatile storage media, but not including random access memory or other temporary memory. The capture process may alternatively be carried out on another computer, after which the resulting digital video file is stored in (e.g., uploaded to) storage device 86.

Network server 82 is coupled through network interface 88 to a network 92, such as the Internet, a LAN, etc. Processor 84 is configured to generate a web page having a hypertext link to the digital video file stored in storage device 86. A network client 94 includes a processor 96, a storage device 98, an input device 100, a display 102, and a network interface 104. Network client 94 is operable via a user to access the web page generated by network server 82 and to actuate the hypertext link to begin downloading the digital video file from storage device 86.

One drawback of downloading video files is that, for very large files, the delay before any portion of the digital video file can be viewed can be on the order of minutes, hours, or longer. Thus, according to one advantageous aspect of system 80, while the digital video file is being downloaded to network client 94 and stored in storage device 98, some of the digital video file which has already been downloaded and stored is being simultaneously played on display 102. A suitable player which supports AVI, MPEG, and other digital video formats is utilized for the video play. This procedure may be referred to as viewing/downloading. Stated another way, a first portion of the digital video file is played from storage device 98 while later portions of the digital video file are still downloading from storage device 86 via network 92 to storage device 98.

One method of launching the player and beginning the play of the first portion is for a user to simply select these steps via input device 100 (e.g., a mouse, a keyboard, etc.) a certain time after the downloading has begun. Alternatively, an algorithm may be provided, either attached to the digital video file (e.g., HTML, Java, a macro, etc.) or as part of the player (e.g., QuickTime, RealPlayer, etc.) which begins playing the digital video file at a predetermined time after the download to storage device 98 has begun. This predetermined time may be pre-programmed or adjusted in real-time based on inputs from client server 94 or network server 82. According to one example, the algorithm calculates the predetermined time based on the download speed (e.g., including network connection speed of network interface 104, etc.), the viewing speed (e.g., frames per second, etc.), and the size of the digital video file. For example, if the viewing speed is four times the

download speed, the algorithm monitors the amount of the file (e.g., in bytes) which is downloaded until 75% of the file is downloaded. When 75% of the file is downloaded, the algorithm begins playing the digital video file from storage device 98. By playing the file at this predetermined time, the digital video file will play substantially without delays for buffering. Of course, other predetermined times are contemplated, including those earlier and later than that set forth in this exemplary embodiment.

Thus, one can view a digital video file shortly after clicking on the hypertext link and before the entire digital video file has downloaded to storage device 98. Once the entire digital video file is finished playing, network client 94 retains a copy of the digital video file in storage device 98 for later playing.

According to one alternative, the digital video data is captured in real-time and streamed in real-time across network 92 (i.e., without first storing to storage device 86) to storage device 98.

While the embodiments and applications of the invention illustrated in the FIGS. and described above are presently preferred, it should be understood that these embodiments are offered by way of example only. For example, while the steps of the exemplary embodiments contemplate recording audio and video at one time and streaming the audio and video at another time, the audio and video may alternatively be fed through system 10 in real-time, thereby facilitating real-time audio/video transmissions. Furthermore, the exemplary software programs mentioned may be replaced by newly developed versions and/or programs in the future. Accordingly, the present invention is not limited to a particular embodiment, but extends to various modifications that nevertheless fall within the scope of the appended claims.

WHAT IS CLAIMED IS:

1. A method of providing a streaming video file, comprising:

providing digital video data having a capture frame size of at least 69,300 pixels per frame; and

converting the digital video data to a streaming video file having a converted frame size of at least 69,300 pixels per frame.

2. The method of claim 1, wherein the capture frame size has an aspect ratio of 4:3 and the converted frame size of has an aspect ratio of 4:3.

3. The method of claim 2, wherein the capture frame size is at least 304 x 228 pixels and the converted frame size is at least 304 x 228 pixels.

4. The method of claim 3, wherein the capture frame size is approximately 320 x 240 pixels and the converted frame size is approximately 320 x 240 pixels.

5. The method of claim 1, wherein the step of providing includes capturing a video signal.

6. The method of claim 5, wherein the step of providing includes digitizing the video signal to generate the digital video data.

7. The method of claim 6, wherein the step of providing includes storing the captured video data as a data file in a storage device, and wherein the step of converting includes retrieving the stored data file from the storage device.

8. The method of claim 1, wherein the step of providing includes retrieving the digital video data from a storage device.

9. The method of claim 1, further comprising compressing the digital video data.

10. The method of claim 9, wherein the digital video data is compressed to an MPEG file format.

11. The method of claim 1, wherein the streaming video file is converted to an RM format or an ASF format.

12. The method of claim 1, wherein the converted frame size is approximately 320 x 240 pixels.

13. The method of claim 1, wherein the digital video data has a capture frame rate of at least 24 frames per second and the streaming video file has a converted frame rate of at least 24 frames per second.

14. The method of claim 1, further comprising streaming the streaming video file across a network.

15. The method of claim 14, wherein the network is the Internet.

16. A method of providing a streaming video file, comprising:

providing digital video data having a capture frame rate of at least 24 frames per second; and

converting the digital video data to a streaming video file having a converted frame rate of at least 24 frames per second.

17. The method of claim 16, wherein the capture frame rate is between 29 and 30 frames per second and the converted frame rate is between 29 and 30 frames per second.

18. The method of claim 16, wherein the step of providing includes capturing a video signal.

19. The method of claim 17, wherein the step of providing includes digitizing the video signal to generate the digital video data.

20. The method of claim 18, wherein the step of providing includes storing the captured video data as a data file in a storage device, and wherein the step of converting includes retrieving the stored data file from the storage device.

21. The method of claim 16, wherein the step of providing includes retrieving the digital video data from a storage device.

22. The method of claim 16, further comprising compressing the digital video data.

23. The method of claim 21, wherein the digital video data is compressed to an MPEG file format.

24. The method of claim 16, wherein the streaming video file is converted to an RM format or an ASF format.

25. The method of claim 16, wherein the digital video data has a capture frame size of at least 69,300 pixels per frame and the streaming video file has a converted frame size of at least 69,300 pixels per frame.

26. The method of claim 25, wherein the capture frame size has an aspect ratio of 4:3 and the converted frame size has an aspect ratio of 4:3.

27. The method of claim 26, wherein the capture frame size is at least 302 x 228 pixels and the converted frame size is at least 302 x 228 pixels.

28. The method of claim 27, wherein the capture frame size is approximately 320 x 240 and the converted frame size is approximately 320 x 240 pixels.

29. The method of claim 16, further comprising streaming the streaming video file across a network.

30. The method of claim 29, wherein the network is the Internet.

31. A method of providing a streaming video file, comprising:

obtaining a source video signal having a predetermined source video parameter;

capturing the source video signal while maintaining substantially the same source video parameter to provide a captured digital video file; and

encoding the captured digital video file while maintaining substantially the same source video parameter to provide a streaming video file.

32. The method of claim 31, wherein the source video parameter includes the frame rate.

33. The method of claim 32, wherein the source video frame rate is at least 24 frames per second.

34. The method of claim 32, wherein the source video frame rate is a real video frame rate.

35. The method of claim 31, wherein the source video parameter includes the number of scanned lines of video per frame.

36. The method of claim 35, wherein the number of scanned lines of video per frame is at least 240.

37. The method of claim 31, wherein the streaming video file has a capture frame size of at least 304 x 228 pixels.

38. The method of claim 37, wherein the streaming video file has a capture frame size is approximately 320 x 240 pixels.

39. The method of claim 31, further comprising editing the captured digital video file using video editing software.

40. The method of claim 31, wherein the step of encoding includes compressing the captured digital video file.

41. The method of claim 31, wherein the captured digital video file is in an MPEG file format.

42. The method of claim 31, wherein the source video signal is provided from a video playback device.

43. A method of generating a streaming video file for streaming over the Internet, comprising:

providing digital video data having a capture frame size of at least 320 x 240 pixels;

compressing the digital video data;

encoding the digital video data into a streaming video file, wherein the streaming video file has a frame size of at least 320 x 240 pixels; and

uploading the streaming video file to an Internet server.

44. The method of claim 43, wherein the streaming video file has a real video frame rate.

45. The method of claim 44, further comprising associating a hypertext link with the streaming video file.

46. The method of claim 45, further comprising running a video player program on an Internet client computer.

47. The method of claim 46, further comprising configuring the video player program for full-screen streaming video.

48. A system for providing a streaming video file, comprising:

means for providing digital video data having a capture frame size of at least 320 x 240 pixels; and

means for converting the digital video data to a streaming video file having a converted frame size of at least 320 x 240 pixels.

49. The system of claim 48, wherein the digital video data has a capture frame rate of at least 24 frames per second and the streaming video file has a converted frame rate of at least 24 frames per second.

50. The system of claim 48, further comprising means for capturing a video signal.

51. The system of claim 48, wherein the means for converting includes means for encoding the digital video file into an RM file format.

52. A system for providing a streaming video file, comprising:

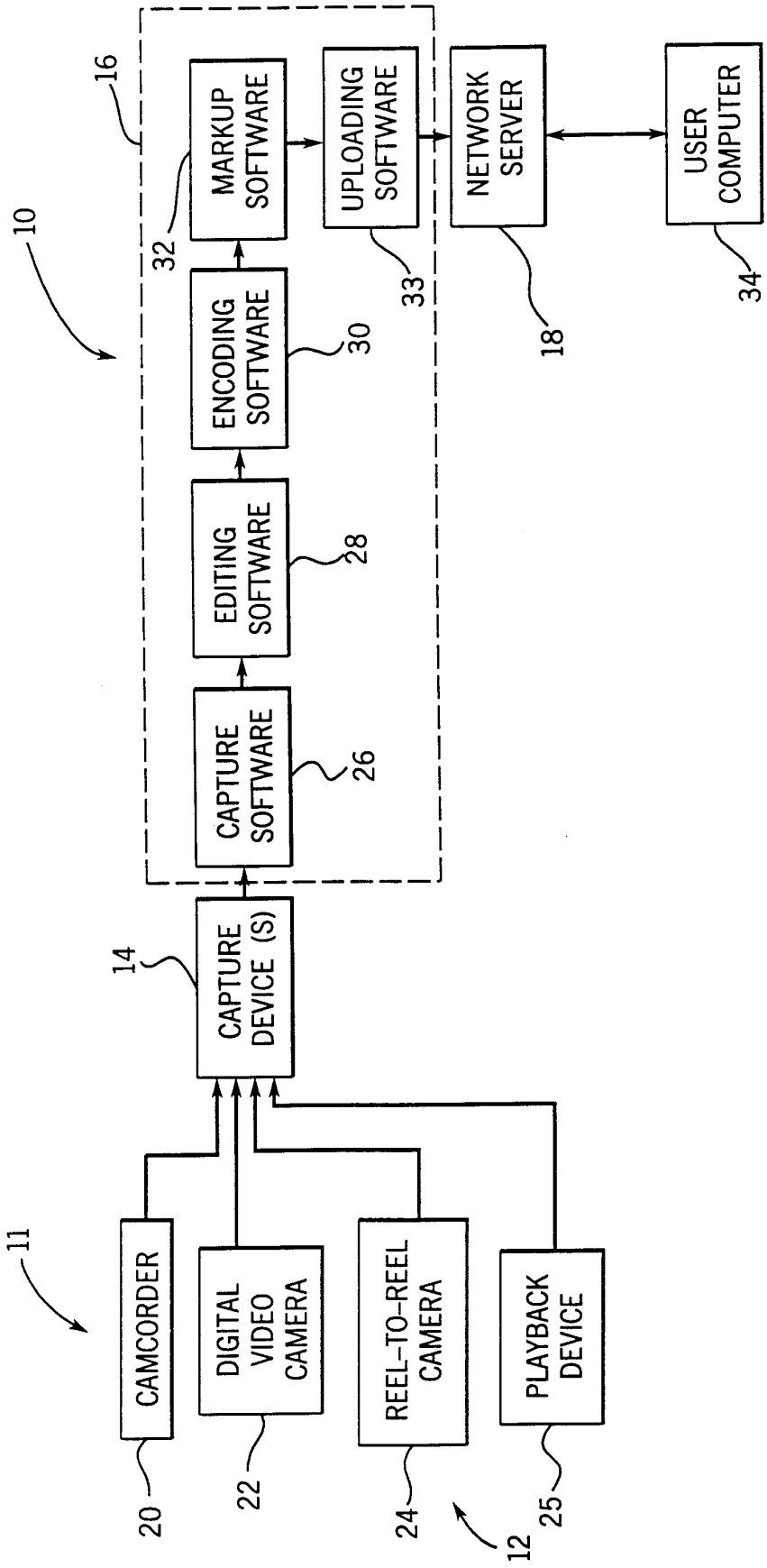
means for providing digital video data having a capture frame rate of at least 24 frames per second; and

means for converting the digital video data to a streaming video file having a converted frame rate of at least 24 frames per second.

53. The system of claim 52, wherein the capture frame size is at least 302 x 228 pixels and the converted frame size is at least 302 x 228 pixels.

54. The system of claim 52, further comprising means for capturing a video signal.

55. The system of claim 52, wherein the means for converting includes means for encoding the digital video data into an RM file format.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CAMCORDER
DIGITAL VIDEO CAMERA
REEL-TO-REEL CAMERA
PLAYBACK DEVICE
CAPTURE DEVICE (S)
CAPTURE SOFTWARE
EDITING SOFTWARE
ENCODING SOFTWARE
MARKUP SOFTWARE
UPLOADING SOFTWARE
NETWORK SERVER
USER COMPUTER

FIG. 1

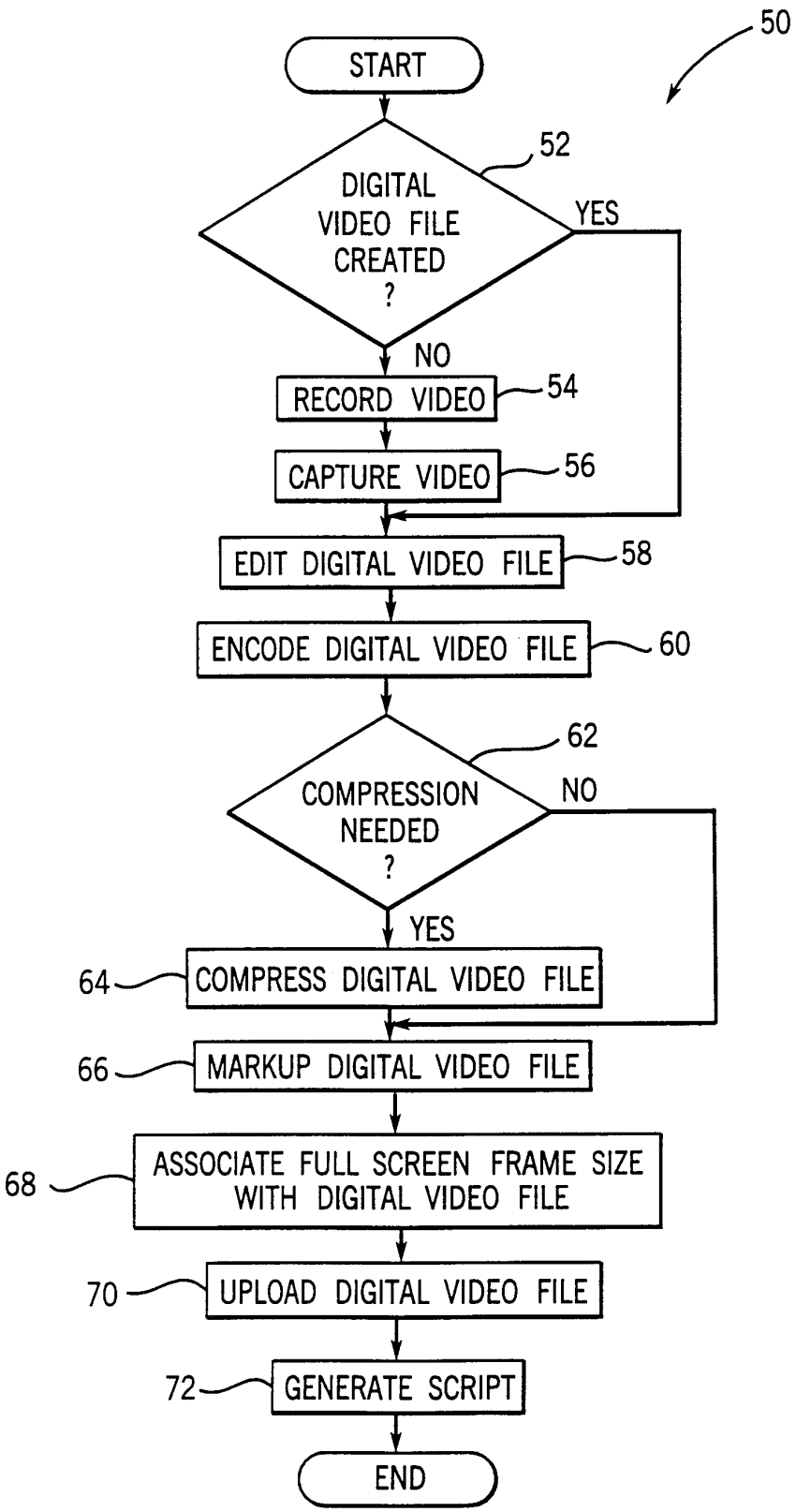
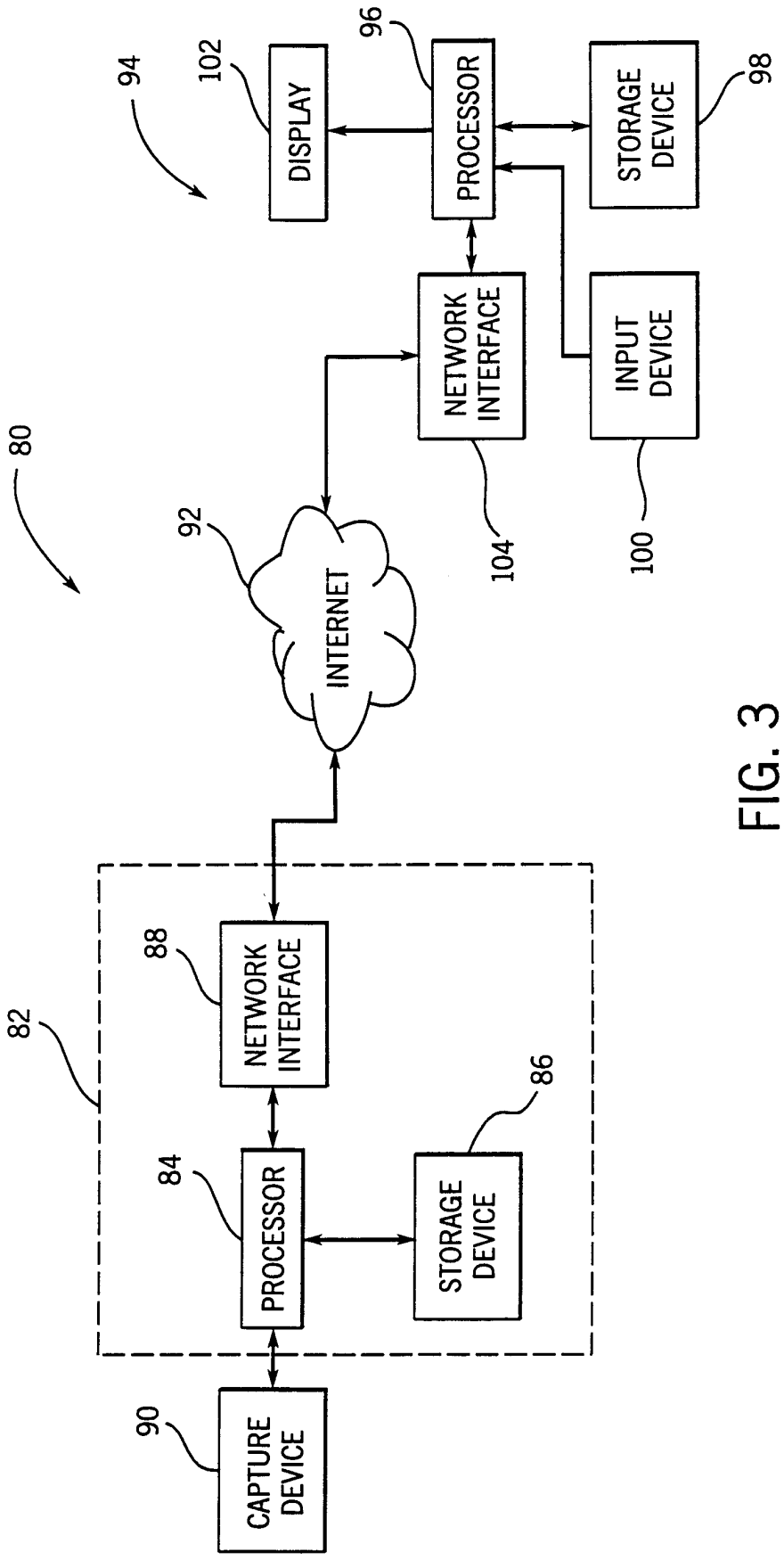

50
START
52
DIGITAL VIDEO FILE CREATED ?
YES
NO
RECORD VIDEO
54
CAPTURE VIDEO
56
EDIT DIGITAL VIDEO FILE
58
ENCODE DIGITAL VIDEO FILE
60
62
COMPRESSION NEEDED ?
NO
YES
64
COMPRESS DIGITAL VIDEO FILE
66
MARKUP DIGITAL VIDEO FILE
68
ASSOCIATE FULL SCREEN FRAME SIZE WITH DIGITAL VIDEO FILE
70
UPLOAD DIGITAL VIDEO FILE
72
GENERATE SCRIPT
END

FIG. 2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96
98
100
102
104
CAPTURE DEVICE
NETWORK INTERFACE
PROCESSOR
STORAGE DEVICE
INTERNET
NETWORK INTERFACE
PROCESSOR
STORAGE DEVICE
INPUT DEVICE
DISPLAY

FIG. 3

INTERNATIONAL SEARCH REPORT

Inte onal Application No
PCT/US 00/15405

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04N7/173 H04N7/24

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JOSÉ ALVEAR: "Web Developer.com Guide to Streaming Multimedia" 9 April 1998 (1998-04-09) , JOHN WILEY & SONS , NEW YORK XP002150042 page 65 -page 86 page 127 -page 139 page 183 -page 204 page 349 -page 370 ---	1-55
A	JAN OZER: "Publishing Digital Video" March 1997 (1997-03) , AP PROFESSIONAL , NEW YORK XP002150059 page 274 -page 290 --- -/--	1-55

[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance

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"P" document published prior to the international filing date but later than the priority date claimed

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
16 October 2000	02/11/2000

Name and mailing address of the ISA	Authorized officer
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INTERNATIONAL SEARCH REPORT

Inte onal Application No
PCT/US 00/15405

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication,where appropriate, of the relevant passages	Relevant to claim No.
A	PROGRESSIVE NETWORKS INC.: "Real Video Content Creation Guide Version 1.0" 'Online! 12 June 1997 (1997-06-12) XP002149004 Retrieved from the Internet: <URL: http://docs.real.com/docs/ccguide_rv10.pdf > 'retrieved on 2000-10-13! page 99, line 7 -page 101, line 18 ---	1-55
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A	US 5 768 535 A (NORTHCUTT J DUANE ET AL) 16 June 1998 (1998-06-16) ---	
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WO 9722201 A	19-06-1997	EP 0867003 A	30-09-1998