

TO: Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
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In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Eastern District of Texas on the following

Trademarks or Patents. (the patent action involves 35 U.S.C. § 292.):

DOCKET NO. 6:12-cv-657	DATE FILED 9/17/2012	U.S. DISTRICT COURT Eastern District of Texas
PLAINTIFF PERSONALWEB TECHNOLOGIES LLC and LEVEL 3 COMMUNICATIONS, LLC.		DEFENDANT NEXSAN TECHNOLOGIES, INC.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	8 Pat's	SEE ATTACHMENT A
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In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY <input type="checkbox"/> Amendment <input type="checkbox"/> Answer <input type="checkbox"/> Cross Bill <input type="checkbox"/> Other Pleading		
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK	
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In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE
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Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
 Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy

ATTACHMENT A TO FORM AO-120
(PersonalWeb v. Nexsan)

PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
5,978,791	November 2, 1999	PersonalWeb Technologies LLC and Level 3 Communications, LLC
6,415,280 B1	July 2, 2002	PersonalWeb Technologies LLC and Level 3 Communications, LLC
6,928,442 B2	August 9, 2005	PersonalWeb Technologies LLC and Level 3 Communications, LLC
7,802,310 B2	September 21, 2010	PersonalWeb Technologies LLC and Level 3 Communications, LLC
7,945,539 B2	May 17, 2011	PersonalWeb Technologies LLC and Level 3 Communications, LLC
7,945,544 B2	May 17, 2011	PersonalWeb Technologies LLC and Level 3 Communications, LLC
7,949,662 B2	May 24, 2011	PersonalWeb Technologies LLC and Level 3 Communications, LLC
8,001,096 B2	August 16, 2011	PersonalWeb Technologies LLC and Level 3 Communications, LLC

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Trademarks or Patents. (the patent action involves 35 U.S.C. § 292.):

DOCKET NO. 6:12-cv-661	DATE FILED 9/17/2012	U.S. DISTRICT COURT Eastern District of Texas
PLAINTIFF PERSONALWEB TECHNOLOGIES LLC and LEVEL 3 COMMUNICATIONS, LLC.		DEFENDANT INTERNATIONAL BUSINESS MACHINES CORPORATION
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 <i>5 Pats.</i>		SEE ATTACHMENT A
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ATTACHMENT A TO FORM AO-120
(PersonalWeb v. IBM)

PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
5,978,791	November 2, 1999	PersonalWeb Technologies LLC and Level 3 Communications, LLC
6,415,280 B1	July 2, 2002	PersonalWeb Technologies LLC and Level 3 Communications, LLC
6,928,442 B2	August 9, 2005	PersonalWeb Technologies LLC and Level 3 Communications, LLC
7,802,310 B2	September 21, 2010	PersonalWeb Technologies LLC and Level 3 Communications, LLC
8,099,420 B2	January 17, 2012	PersonalWeb Technologies LLC and Level 3 Communications, LLC

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Trademarks or Patents. (the patent action involves 35 U.S.C. § 292.):

DOCKET NO. 6::12-cv-659	DATE FILED 9/17/2012	U.S. DISTRICT COURT Eastern District of Texas
PLAINTIFF PERSONALWEB TECHNOLOGIES LLC and LEVEL 3 COMMUNICATIONS, LLC.		DEFENDANT RACKSPACE US INC. and RACKSPACE HOSTING, INC.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	<i>9 Pat.</i>		SEE ATTACHMENT A
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**ATTACHMENT A TO FORM AO-120
(PersonalWeb v. Rackspace)**

PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
5,978,791	November 2, 1999	PersonalWeb Technologies LLC and Level 3 Communications, LLC
6,415,280 B1	July 2, 2002	PersonalWeb Technologies LLC and Level 3 Communications, LLC
6,928,442 B2	August 9, 2005	PersonalWeb Technologies LLC and Level 3 Communications, LLC
7,802,310 B2	September 21, 2010	PersonalWeb Technologies LLC and Level 3 Communications, LLC
7,945,539 B2	May 17, 2011	PersonalWeb Technologies LLC and Level 3 Communications, LLC
7,945,544 B2	May 17, 2011	PersonalWeb Technologies LLC and Level 3 Communications, LLC
7,949,662 B2	May 24, 2011	PersonalWeb Technologies LLC and Level 3 Communications, LLC
8,001,096 B2	August 16, 2011	PersonalWeb Technologies LLC and Level 3 Communications, LLC
8,099,420 B2	January 17, 2012	PersonalWeb Technologies LLC and Level 3 Communications, LLC

TO: <p style="text-align: center;">Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450</p>	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
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In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court For the Eastern District of Texas, Tyler Division on the following

Trademarks or Patents. (the patent action involves 35 U.S.C. § 292.):

DOCKET NO. 6:12-cv-00660	DATE FILED 12/17/2012	U.S. DISTRICT COURT For the Eastern District of Texas, Tyler Division
PLAINTIFF PersonalWeb Technologies, LLC, and Level 3 Communications, LLC		DEFENDANT Apple Inc.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 5,978,791	11/2/1999	PersonalWeb and Level 3 Communications
2 6,415,280	7/2/2002	PersonalWeb and Level 3 Communications
3 7,802,310	9/21/2010	PersonalWeb and Level 3 Communications
4 7,945,539	5/17/2011	PersonalWeb and Level 3 Communications
5 See Attachment A		

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

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 Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy

result of Defendant's wrongful acts in an amount subject to proof at trial. Defendant's infringement of PersonalWeb's rights under the '096 patent will continue to damage PersonalWeb, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

JURY DEMAND

32. PersonalWeb demands a trial by jury on all issues.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff PersonalWeb requests entry of judgment in its favor and against Defendant as follows:

- a) Declaration that Defendant has infringed directly, and/or indirectly, U.S. Patent Nos. 5,978,791, 6,415,280, 7,802,310, 7,945,539, 7,945,544, and 8,001,096 as described in this action;
- b) Permanently enjoining Defendant and its respective officers, agents, employees, and those acting in privity with them, from further infringement, contributory infringement and/or inducing infringement of U.S. Patent Nos. 5,978,791, 6,415,280, 7,802,310, 7,945,539, 7,945,544, and 8,001,096;
- c) Awarding the damages arising out of Defendant's infringement of U.S. Patent Nos. 5,978,791, 6,415,280, 7,802,310, 7,945,539, 7,945,544, and 8,001,096, including enhanced damages pursuant to 35 U.S.C. § 284 together with prejudgment and post-judgment interest, in an amount according to proof;
- d) An award of attorneys' fees pursuant to 35 U.S.C. § 285 or as otherwise permitted by law; and
- e) For such other costs and further relief as the Court may deem just and proper.

DATED: September 17, 2012

Respectfully submitted,

By: /s/ Max L. Tribble, Jr.
Max L. Tribble, Jr.
State Bar No. 20213950
mtribble@susmangodfrey.com
SUSMAN GODFREY L.L.P.
1000 Louisiana Street, Suite 5100
Houston, Texas 77002
Telephone: (713) 651-9366
Facsimile: (713) 654-6666

Lead Attorney for Plaintiff
PersonalWeb Technologies, LLC

Joseph Grinstein
State Bar No. 24002188
jgrinstein@susmangodfrey.com
Ashley L. McMillian
State Bar No. 24070252
amcmillian@susmangodfrey.com
Sandeep Seth
State Bar No. 18043000
sseth@susmangodfrey.com
SUSMAN GODFREY L.L.P.
1000 Louisiana Street, Suite 5100
Houston, Texas 77002
Telephone: (713) 651-9366
Facsimile: (713) 654-6666

Marc M. Seltzer
CA State Bar No. 54534
mseltzer@susmangodfrey.com
Kalpana Srinivasan
CA State Bar No. 237460
ksrinivasan@susmangodfrey.com
SUSMAN GODFREY L.L.P.
1901 Ave of the Stars, Suite 950
Los Angeles, CA 90067

Justin A. Nelson
State Bar No. 24034766
jnelson@susmangodfrey.com
SUSMAN GODFREY L.L.P.
1201 Third Ave, Suite 3800
Seattle, WA 98101
Telephone: (206) 516-3880
Facsimile: (206) 516-3883

Attorneys for Plaintiff
PersonalWeb Technologies, LLC

/s/ David D. Wier

David D. Wier, Esq.
David.Wier@Level3.com
Vice President, Patent Counsel
LEVEL 3 COMMUNICATIONS, INC.
1025 Eldorado Boulevard
Broomfield, Colorado 80021

Attorney for Plaintiff
Level 3 Communications, LLC

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION**

**PERSONALWEB TECHNOLOGIES, LLC,
and LEVEL 3 COMMUNICATIONS, LLC,**

Plaintiff,

vs.

APPLE INC.

Defendants.

Civil Action No.

JURY TRIAL DEMANDED

**ATTACHMENT A TO REPORT ON THE FILING OR
DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK**

Patent or Trademark No.	Date of Patent or Trademark	Holder of Patent or Trademark
5. 7,945,544	5/17/2011	PersonalWeb and Level 3 Communications
6. 8,001,096	8/16/2011	PersonalWeb and Level 3 Communications

PersonalWeb has, among other rights, certain defined rights to use, practice, license, sublicense, enforce and/or litigate the Patents-in-Suit in fields other than the Level 3 Exclusive Field (the “PersonalWeb Patent Field”).

3. All infringement allegations, statements describing PersonalWeb, statements describing any Defendant (or any Defendant’s products) and any statements made regarding jurisdiction and venue are made by PersonalWeb alone, and not by Level 3. PersonalWeb alleges that the infringements at issue in this case all occur within, and are limited to, the PersonalWeb Patent Field. Accordingly, PersonalWeb has not provided notice to Level 3—under Section 6.4.1 of the Agreement or otherwise—that PersonalWeb desires to bring suit in the Level 3 Exclusive Field in its own name on its own behalf or that PersonalWeb knows or suspects that Defendant is infringing or has infringed any of Level 3’s rights in the patents.

THE PARTIES

4. Plaintiff PersonalWeb Technologies, LLC is a limited liability company duly organized and existing under the laws of Texas with its principal place of business in Tyler, Texas.

5. Plaintiff Level 3 Communications, LLC is a limited liability company organized under the laws of Delaware with its principal place of business at 1025 Eldorado Boulevard, Broomfield, CO 80021.

6. PersonalWeb’s infringement claims asserted in this case are asserted by PersonalWeb and all fall outside the Level 3 Exclusive Field. Level 3 is currently not asserting patent infringement in this case in the Level 3 Exclusive Field against any Defendant.

7. Defendant Apple Inc. is, upon information and belief, a California corporation with its principal place of business at 1 Infinite Loop, Cupertino, CA 95014.

JURISDICTION AND VENUE

8. The court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a) because this action arises under the patent laws of the United States, 35 U.S.C. §§ 1 *et seq.*

9. Venue is proper in this federal district pursuant to 28 U.S.C. §§ 1391(b)-(c) and 1400(b) because plaintiff PersonalWeb is a limited liability company incorporated in Smith County, Texas with its principal place of business in Tyler, Texas.

10. Defendant has done business in this District, have committed acts of infringement in this District, and continue to commit acts of infringement in this District, entitling PersonalWeb to relief.

PERSONALWEB BACKGROUND

11. PersonalWeb draws on its proprietary technology to innovate and develop software products, including a social learning platform and digital content management system.

12. PersonalWeb's software technology enhances the delivery of relevant content by using natural language and semantic analysis. Utilizing this technology, PersonalWeb has developed a product called StudyPods, which enables students to connect and collaborate online.

13. PersonalWeb also develops the Global File Registry digital content management system, an online database containing unique identifiers of millions of files collected on behalf of content owners and others. The registry is capable of identifying files that infringe copyrights and replacing them with other content.

INFRINGEMENT OF U.S. PATENT NO. 5,978,791

14. On November 2, 1999, United States Patent No. 5,978,791 (the "'791 patent'") was duly and legally issued for an invention entitled "Data Processing System Using Substantially Unique Identifiers to Identify Data Items, Whereby Identical Data Items Have the Same Identifiers." PersonalWeb has an ownership interest in the '791 patent by assignment, including the exclusive right to enforce the '791 patent within the PersonalWeb Patent Field, and

continues to hold that ownership interest in the '791 patent. A true and correct copy of the '791 patent is attached hereto as Exhibit A.

15. Defendant Apple has infringed and continues to infringe the '791 patent by its manufacture, use, sale, importation, and/or offer for sale of its iTunes and iCloud services and any other Apple products or services utilizing Apple's content upload and synchronization system within the PersonalWeb Patent Field and its contributing to and inducement of others to manufacture, use, sell, import, and/or offer for sale infringing products. Defendant is liable for its infringement of the '791 patent pursuant to 35 U.S.C. § 271.

16. Defendant's acts of infringement have caused damage to PersonalWeb, and PersonalWeb is entitled to recover from Defendant the damages sustained by PersonalWeb as a result of Defendant's wrongful acts in an amount subject to proof at trial. Defendant's infringement of PersonalWeb's rights under the '791 patent will continue to damage PersonalWeb, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

INFRINGEMENT OF U.S. PATENT NO. 6,415,280

17. On July 2, 2002, United States Patent No. 6,415,280 (the "'280 patent'") was duly and legally issued for an invention entitled "Identifying and Requesting Data in Network Using Identifiers Which Are Based On Contents of Data." PersonalWeb has an ownership interest in the '280 patent by assignment, including the exclusive right to enforce the '280 patent within the PersonalWeb Patent Field, and continues to hold that ownership interest in the '280 patent. A true and correct copy of the '280 patent is attached hereto as Exhibit B.

18. Defendant has infringed and continues to infringe the '280 patent by its manufacture, use, sale, importation, and/or offer for sale of its iTunes and iCloud services within the PersonalWeb Patent Field utilizing Apple's content upload and synchronization system within the PersonalWeb Patent Field and its contributing to and inducement of others to manufacture, use, sell, import, and/or offer for sale infringing products. Defendant is liable for its infringement of the '280 patent pursuant to 35 U.S.C. § 271.

19. Defendant's acts of infringement have caused damage to PersonalWeb, and PersonalWeb is entitled to recover from Defendant the damages sustained by PersonalWeb as a result of Defendant's wrongful acts in an amount subject to proof at trial. Defendant's infringement of PersonalWeb's rights under the '280 patent will continue to damage PersonalWeb, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

INFRINGEMENT OF U.S. PATENT NO. 7,802,310

20. On September 21, 2010, United States Patent No. 7,802,310 (the "'310 patent") was duly and legally issued for an invention entitled "Controlling Access to Data in a Data Processing System." PersonalWeb has an ownership interest in the '310 patent by assignment, including the exclusive right to enforce the '310 patent within the PersonalWeb Patent Field, and continues to hold that ownership interest in the '310 patent. A true and correct copy of the '310 patent is attached hereto as Exhibit C.

21. Defendant has infringed and continues to infringe the '310 patent by its manufacture, use, sale, importation, and/or offer for sale of its iTunes and iCloud services and any other Apple products or services utilizing Apple's content upload and synchronization system within the PersonalWeb Patent Field and its contributing to and inducement of others to manufacture, use, sell, import, and/or offer for sale infringing products. Defendant is liable for its infringement of the '310 patent pursuant to 35 U.S.C. § 271.

22. Defendant's acts of infringement have caused damage to PersonalWeb, and PersonalWeb is entitled to recover from Defendant the damages sustained by PersonalWeb as a result of Defendant's wrongful acts in an amount subject to proof at trial. Defendant's infringement of PersonalWeb's rights under the '310 patent will continue to damage PersonalWeb, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

INFRINGEMENT OF U.S. PATENT NO. 7,945,539

23. On May 17, 2011, United States Patent No. 7,945,539 (the “’539 patent”) was duly and legally issued for an invention entitled “Distributing and Accessing Data in a Data Processing System.” PersonalWeb has an ownership interest in the ’539 patent by assignment, including the exclusive right to enforce the ’539 patent within the PersonalWeb Patent Field, and continues to hold that ownership interest in the ’539 patent. A true and correct copy of the ’539 patent is attached hereto as Exhibit D.

24. Defendant has infringed and continues to infringe the ’539 patent by its manufacture, use, sale, importation, and/or offer for sale of its iTunes and iCloud services and any other Apple products or services utilizing Apple’s content upload and synchronization system within the PersonalWeb Patent Field and its contributing to and inducement of others to manufacture, use, sell, import, and/or offer for sale infringing products. Defendant is liable for its infringement of the ’539 patent pursuant to 35 U.S.C. § 271.

25. Defendant’s acts of infringement have caused damage to PersonalWeb, and PersonalWeb is entitled to recover from Defendant the damages sustained by PersonalWeb as a result of Defendant’s wrongful acts in an amount subject to proof at trial. Defendant’s infringement of PersonalWeb’s rights under the ’539 patent will continue to damage PersonalWeb, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

INFRINGEMENT OF U.S. PATENT NO. 7,945,544

26. On May 17, 2011, United States Patent No. 7,945,544 (the “’544 patent”) was duly and legally issued for an invention entitled “Similarity-Based Access Control of Data in a Data Processing System.” PersonalWeb has an ownership interest in the ’544 patent by assignment, including the exclusive right to enforce the ’544 patent within the PersonalWeb Patent Field, and continues to hold that ownership interest in the ’544 patent. A true and correct copy of the ’544 patent is attached hereto as Exhibit E.

27. Defendant has infringed and continues to infringe the '544 patent by its manufacture, use, sale, importation, and/or offer for sale of its iTunes and iCloud services within the PersonalWeb Patent Field and any other Apple products or services utilizing Apple's content upload and synchronization system and its contributing to and its contributing to and inducement of others to manufacture, use, sell, import, and/or offer for sale infringing products. Defendant is liable for its infringement of the '544 patent pursuant to 35 U.S.C. § 271.

28. Defendant's acts of infringement have caused damage to PersonalWeb, and PersonalWeb is entitled to recover from Defendant the damages sustained by PersonalWeb as a result of Defendant's wrongful acts in an amount subject to proof at trial. Defendant's infringement of PersonalWeb's rights under the '544 patent will continue to damage PersonalWeb, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

INFRINGEMENT OF U.S. PATENT NO. 8,001,096

29. On August 16, 2011, United States Patent No. 8,001,096 (the "'096 patent") was duly and legally issued for an invention entitled "Computer File System Using Content-Dependent File Identifiers." PersonalWeb has an ownership interest in the '096 patent by assignment, including the exclusive right to enforce the '096 patent within the PersonalWeb Patent Field, and continues to hold that ownership interest in the '096 patent. A true and correct copy of the '096 patent is attached hereto as Exhibit F.

30. Defendant has infringed and continues to infringe the '096 patent by its manufacture, use, sale, importation, and/or offer for sale of its iTunes and iCloud services and any other Apple products or services utilizing Apple's content upload and synchronization system within the PersonalWeb Patent Field and its contributing to and inducement of others to manufacture, use, sell, import, and/or offer for sale infringing products. Defendant is liable for its infringement of the '096 patent pursuant to 35 U.S.C. § 271.

31. Defendant's acts of infringement have caused damage to PersonalWeb, and PersonalWeb is entitled to recover from Defendant the damages sustained by PersonalWeb as a

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DOCKET NO. 6:12-cv-00663	DATE FILED 9/17/2012	U.S. DISTRICT COURT For the Eastern District of Texas, Tyler Division
PLAINTIFF PersonalWeb Technologies, LLC, and Level 3 Communications, LLC		DEFENDANT Microsoft Corporation,
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 5,978,791	11/2/1999	PersonalWeb and Level 3 Communications
2 6,415,280	7/2/2002	PersonalWeb and Level 3 Communications
3 7,802,310	9/21/2010	PersonalWeb and Level 3 Communications
4 8,001,096	8/16/2011	PersonalWeb and Level 3 Communications
5 See Attached		

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its contributing to and inducement of others to manufacture, use, sell, import, and/or offer for sale infringing products or services. Defendant is liable for its infringement of the '544 patent pursuant to 35 U.S.C. § 271.

31. Defendant's acts of infringement have caused damage to PersonalWeb, and PersonalWeb is entitled to recover from Defendant the damages sustained by PersonalWeb as a result of Defendant's wrongful acts in an amount subject to proof at trial. Defendant's infringement of PersonalWeb's rights under the '544 patent will continue to damage PersonalWeb, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

WILLFUL INFRINGEMENT

32. Upon information and belief, the Defendant's described infringement of any or all of the above-named patents is willful and deliberate, entitling PersonalWeb to increased damages under 35 U.S.C. § 284 and to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285. Defendant had prior knowledge of the Patents-in-Suit and the patented technology because among other reasons, the patents were cited in dozens of Defendant's own patent applications, dating back to patents issued in 2002.

33. For example, the following Microsoft patents cite to PersonalWeb's '280 patent: 8,112,452 (issued on 2/7/12); 7,886,364 (issued on 2/8/11); 7,770,023 (issued on 8/3/10); 7,685,415 (issued on 3/23/10); 7,617,256 (issued on 11/10/09); 7,571,327 (issued on 8/4/09); 7,571,186 (issued on 8/4/09); 7,555,781 (issued on 6/30/09); 7,555,656 (issued on 6/30/09); 7,539,867 (issued on 5/26/09); 7,571,327 (issued on 8/4/09); 7,571,186 (issued on 8/4/09); 7,555,781 (issued on 6/30/09); 7,555,656 (issued on 6/30/09); 7,539,867 (issued on 5/26/09); 7,519,623 (issued on 4/14/09); 7,509,423 (issued on 3/24/09); 7,505,970 (issued on 3/17/09); 7,487,245 (issued on 2/3/09); 7,475,258 (issued on 1/6/09); 7,454,612 (issued on 11/ 18/08); 7,444,387 (issued on 11/28/08); 7,415,608 (issued on 8/19/08); 7,401,220 (issued on 7/15/08); 7,359,937 (issued on 4/15/08); 7,346,774 (issued on 3/18/08); 7,058,978 (issued on 6/ 6/06).

34. The following Microsoft patents cite to PersonalWeb's '791 patent: 7,707,180 (issued on 4/27/10); 7,617,256 (issued on 11/10/09); 7,328,251 (issued on 2/5/08); 7,284,243 (issued on 10/16/07); 7,117,535 (issued on 10/3/06); 6,626,956 (issued on 9/30/03); 6,370,549 (issued on 4/9/02).

JURY DEMAND

35. PersonalWeb demands a trial by jury on all issues.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff PersonalWeb requests entry of judgment in its favor and against Defendant as follows:

a) Declaration that Defendant has infringed directly, and/or indirectly, U.S. Patent Nos. 5,978,791, 6,415,280, 7,802,310, 8,001,096, 7,945,539, and 7,945,544 as described in this action;

b) Permanently enjoining Defendant and its respective officers, agents, employees, and those acting in privity with them, from further infringement, contributory infringement and/or inducing infringement of U.S. Patent Nos. 5,978,791, 6,415,280, 7,802,310, 8,001,096, 7,945,539, and 7,945,544;

c) Awarding the damages arising out of Defendant's infringement of U.S. Patent Nos. 5,978,791, 6,415,280, 7,802,310, 8,001,096, 7,945,539, and 7,945,544, including enhanced damages pursuant to 35 U.S.C. § 284 together with prejudgment and post-judgment interest, in an amount according to proof;

d) An award of attorneys' fees pursuant to 35 U.S.C. § 285 or as otherwise permitted by law; and

e) For such other costs and further relief as the Court may deem just and proper.

DATED: September 17, 2012

Respectfully submitted,

By: /s/ Max L. Tribble, Jr.
Max L. Tribble, Jr.
State Bar No. 20213950
mtribble@susmangodfrey.com
SUSMAN GODFREY L.L.P.
1000 Louisiana Street, Suite 5100
Houston, Texas 77002
Telephone: (713) 651-9366
Facsimile: (713) 654-6666

Lead Attorney for Plaintiff
PersonalWeb Technologies, LLC

Joseph Grinstein
State Bar No. 24002188
jgrinstein@susmangodfrey.com
Ashley L. McMillian
State Bar No. 24070252
amcmillian@susmangodfrey.com
Sandeep Seth
State Bar No. 18043000
sseth@susmangodfrey.com
SUSMAN GODFREY L.L.P.
1000 Louisiana Street, Suite 5100
Houston, Texas 77002
Telephone: (713) 651-9366
Facsimile: (713) 654-6666

Marc M. Seltzer
CA State Bar No. 54534
mseltzer@susmangodfrey.com
Kalpana Srinivasan
CA State Bar No. 237460
ksrinivasan@susmangodfrey.com
SUSMAN GODFREY L.L.P.
1901 Ave of the Stars, Suite 950
Los Angeles, CA 90067

Justin A. Nelson
State Bar No. 24034766
jnelson@susmangodfrey.com
SUSMAN GODFREY L.L.P.
1201 Third Ave, Suite 3800
Seattle, WA 98101
Telephone: (206) 516-3880
Facsimile: (206) 516-3883

Attorneys for Plaintiff
PersonalWeb Technologies, LLC

/s/ David D. Wier
David D. Wier, Esq.
David.Wier@Level3.com
Vice President, Patent Counsel
LEVEL 3 COMMUNICATIONS, INC.
1025 Eldorado Boulevard
Broomfield, Colorado 80021

Attorney for Plaintiff
Level 3 Communications, LLC

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION**

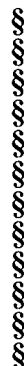
**PERSONALWEB TECHNOLOGIES, LLC,
and LEVEL 3 COMMUNICATIONS, LLC,**

Plaintiff,

vs.

MICROSOFT CORPORATION,

Defendants.



Civil Action No.

JURY TRIAL DEMANDED

**ATTACHMENT A TO REPORT ON THE FILING OR
DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK**

Patent or Trademark No.	Date of Patent or Trademark	Holder of Patent or Trademark
5. 7,945,539	5/17/2011	PersonalWeb and Level 3 Communications
6. 7,945,544	5/17/2011	PersonalWeb and Level 3 Communications

PersonalWeb has, among other rights, certain defined rights to use, practice, license, sublicense, enforce and/or litigate the Patents-in-Suit in fields other than the Level 3 Exclusive Field (the “PersonalWeb Patent Field”).

3. All infringement allegations, statements describing PersonalWeb, statements describing any Defendant (or any Defendant’s products) and any statements made regarding jurisdiction and venue are made by PersonalWeb alone, and not by Level 3. PersonalWeb alleges that the infringements at issue in this case all occur within, and are limited to, the PersonalWeb Patent Field. Accordingly, PersonalWeb has not provided notice to Level 3—under Section 6.4.1 of the Agreement or otherwise—that PersonalWeb desires to bring suit in the Level 3 Exclusive Field in its own name on its own behalf or that PersonalWeb knows or suspects that Defendant is infringing or has infringed any of Level 3’s rights in the patents.

THE PARTIES

4. Plaintiff PersonalWeb Technologies, LLC is a limited liability company duly organized and existing under the laws of Texas with its principal place of business in Tyler, Texas.

5. Plaintiff Level 3 Communications, LLC is a limited liability company organized under the laws of Delaware with its principal place of business at 1025 Eldorado Boulevard, Broomfield, CO 80021.

6. PersonalWeb’s infringement claims asserted in this case are asserted by PersonalWeb and all fall outside the Level 3 Exclusive Field. Level 3 is currently not asserting patent infringement in this case in the Level 3 Exclusive Field against any Defendant.

7. Defendant Microsoft Corporation is, upon information and belief, a Washington corporation with its principal place of business at One Microsoft Way, Redmond Washington 98052.

JURISDICTION AND VENUE

8. The court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a) because this action arises under the patent laws of the United States, 35 U.S.C. §§ 1 *et seq.*

9. Venue is proper in this federal district pursuant to 28 U.S.C. §§ 1391(b)-(c) and 1400(b) because Plaintiff PersonalWeb is a limited liability company incorporated in Smith County, Texas with its principal place of business in Tyler, Texas.

10. Defendant has done business in this District, has committed acts of infringement in this District, and continues to commit acts of infringement in this District, entitling PersonalWeb to relief.

PERSONALWEB BACKGROUND

11. PersonalWeb draws on its proprietary technology to innovate and develop software products, including a social learning platform and digital content management system.

12. PersonalWeb's software technology enhances the delivery of relevant content by using natural language and semantic analysis. Utilizing this technology, PersonalWeb has developed a product called StudyPods, which enables students to connect and collaborate online.

13. PersonalWeb also develops the Global File Registry digital content management system, an online database containing unique identifiers of millions of files collected on behalf of content owners and others. The registry is capable of identifying files that infringe copyrights and replacing them with other content.

INFRINGEMENT OF U.S. PATENT NO. 5,978,791

14. On November 2, 1999, United States Patent No. 5,978,791 (the "'791 patent") was duly and legally issued for an invention entitled "Data Processing System Using Substantially Unique Identifiers to Identify Data Items, Whereby Identical Data Items Have the

Same Identifiers.” PersonalWeb has an ownership interest in the ’791 patent by assignment, including the exclusive right to enforce the ’791 patent within the PersonalWeb Patent Field, and continues to hold that ownership interest in the ’791 patent. A true and correct copy of the ’791 patent is attached hereto as Exhibit A.

15. Defendant has infringed and continues to infringe the ’791 patent by its manufacture, use, sale, importation, and/or offer for sale of its products and services utilizing Defendant’s Remote Differential Compression technology; Defendant’s search engine Bing and/or Defendant’s digital rights management system within the PersonalWeb Patent Field and its contributing to and inducement of others to manufacture, use, sell, import, and/or offer for sale infringing products or services. Defendant is liable for its infringement of the ’791 patent pursuant to 35 U.S.C. § 271.

16. Defendant’s acts of infringement have caused damage to PersonalWeb, and PersonalWeb is entitled to recover from Defendant the damages sustained by PersonalWeb as a result of Defendant’s wrongful acts in an amount subject to proof at trial. Defendant’s infringement of PersonalWeb’s rights under the ’791 patent will continue to damage PersonalWeb, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

INFRINGEMENT OF U.S. PATENT NO. 6,415,280

17. On July 2, 2002, United States Patent No. 6,415,280 (the “’280 patent”) was duly and legally issued for an invention entitled “Identifying and Requesting Data in Network Using Identifiers Which Are Based On Contents of Data.” PersonalWeb has an ownership interest in the ’280 patent by assignment, including the exclusive right to enforce the ’280 patent within the PersonalWeb Patent Field, and continues to hold that ownership interest in the ’280 patent. A true and correct copy of the ’280 patent is attached hereto as Exhibit B.

18. Defendant has infringed and continues to infringe the ’280 patent by its manufacture, use, sale, importation, and/or offer for sale of its products and services utilizing Defendant’s Remote Differential Compression technology; Defendant’s search engine Bing

and/or Defendant's digital rights management system within the PersonalWeb Patent Field and its contributing to and inducement of others to manufacture, use, sell, import, and/or offer for sale infringing products or services. Defendant is liable for its infringement of the '280 patent pursuant to 35 U.S.C. § 271.

19. Defendant's acts of infringement have caused damage to PersonalWeb, and PersonalWeb is entitled to recover from Defendant the damages sustained by PersonalWeb as a result of Defendant's wrongful acts in an amount subject to proof at trial. Defendant's infringement of PersonalWeb's rights under the '280 patent will continue to damage PersonalWeb, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

INFRINGEMENT OF U.S. PATENT NO. 7,802,310

20. On September 21, 2010, United States Patent No. 7,802,310 (the "'310 patent") was duly and legally issued for an invention entitled "Controlling Access to Data in a Data Processing System." PersonalWeb has an ownership interest in the '310 patent by assignment, including the exclusive right to enforce the '310 patent within the PersonalWeb Patent Field, and continues to hold that ownership interest in the '310 patent. A true and correct copy of the '310 patent is attached hereto as Exhibit C.

21. Defendant has infringed and continues to infringe the '310 patent by its manufacture, use, sale, importation, and/or offer for sale of its products and services utilizing Defendant's Remote Differential Compression technology; Defendant's search engine Bing and/or Defendant's digital rights management system within the PersonalWeb Patent Field and its contributing to and inducement of others to manufacture, use, sell, import, and/or offer for sale infringing products or services. Defendant is liable for its infringement of the '310 patent pursuant to 35 U.S.C. § 271.

22. Defendant's acts of infringement have caused damage to PersonalWeb, and PersonalWeb is entitled to recover from Defendant the damages sustained by PersonalWeb as a result of Defendant's wrongful acts in an amount subject to proof at trial. Defendant's

infringement of PersonalWeb's rights under the '310 patent will continue to damage PersonalWeb, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

INFRINGEMENT OF U.S. PATENT NO. 8,001,096

23. On August 16, 2011, United States Patent No. 8,001,096 (the "'096 patent") was duly and legally issued for an invention entitled "Computer File System Using Content-Dependent File Identifiers." PersonalWeb has an ownership interest in the '096 patent by assignment, including the exclusive right to enforce the '096 patent within the PersonalWeb Patent Field, and continues to hold that ownership interest in the '096 patent. A true and correct copy of the '096 patent is attached hereto as Exhibit D.

24. Defendant has infringed and continues to infringe the '096 patent by its manufacture, use, sale, importation, and/or offer for sale of its products and services utilizing Defendant's Remote Differential Compression technology; Defendant's search engine Bing and/or Defendant's digital rights management system within the PersonalWeb Patent Field and its contributing to and inducement of others to manufacture, use, sell, import, and/or offer for sale infringing products or services. Defendant is liable for its infringement of the '096 patent pursuant to 35 U.S.C. § 271.

25. Defendant's acts of infringement have caused damage to PersonalWeb, and PersonalWeb is entitled to recover from Defendant the damages sustained by PersonalWeb as a result of Defendant's wrongful acts in an amount subject to proof at trial. Defendant's infringement of PersonalWeb's rights under the '096 patent will continue to damage PersonalWeb, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

INFRINGEMENT OF U.S. PATENT NO. 7,945,539

26. On May 17, 2011, United States Patent No. 7,945,539 (the "'539 patent") was duly and legally issued for an invention entitled "Distributing and Accessing Data in a Data Processing System." PersonalWeb has an ownership interest in the '539 patent by assignment,

including the exclusive right to enforce the '539 patent within the PersonalWeb Patent Field, and continues to hold that ownership interest in the '539 patent. A true and correct copy of the '539 patent is attached hereto as Exhibit E.

27. Defendant has infringed and continues to infringe the '539 patent by its manufacture, use, sale, importation, and/or offer for sale of its products and services utilizing Defendant's Remote Differential Compression technology; Defendant's search engine Bing and/or Defendant's digital rights management system within the PersonalWeb Patent Field and its contributing to and inducement of others to manufacture, use, sell, import, and/or offer for sale infringing products or services. Defendant is liable for its infringement of the '539 patent pursuant to 35 U.S.C. § 271.

28. Defendant's acts of infringement have caused damage to PersonalWeb, and PersonalWeb is entitled to recover from Defendant the damages sustained by PersonalWeb as a result of Defendant's wrongful acts in an amount subject to proof at trial. Defendant's infringement of PersonalWeb's rights under the '539 patent will continue to damage PersonalWeb, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

INFRINGEMENT OF U.S. PATENT NO. 7,945,544

29. On May 17, 2011, United States Patent No. 7,945,544 (the "'544 patent") was duly and legally issued for an invention entitled "Similarity-Based Access Control of Data in a Data Processing System." PersonalWeb has an ownership interest in the '544 patent by assignment, including the exclusive right to enforce the '544 patent within the PersonalWeb Patent Field, and continues to hold that ownership interest in the '544 patent. A true and correct copy of the '544 patent is attached hereto as Exhibit F.

30. Defendant has infringed and continues to infringe the '544 patent by its manufacture, use, sale, importation, and/or offer for sale of its products and services utilizing Defendant's Remote Differential Compression technology; Defendant's search engine Bing and/or Defendant's digital rights management system within the PersonalWeb Patent Field and

TO: Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
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In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court For the Eastern District of Texas, Tyler Division on the following Trademarks or Patents. (the patent action involves 35 U.S.C. § 292.):

DOCKET NO. 6:12-cv-00662	DATE FILED 9/17/2012	U.S. DISTRICT COURT For the Eastern District of Texas, Tyler Division
PLAINTIFF PersonalWeb Technologies, LLC, and Level 3 Communications, LLC		DEFENDANT Facebook Inc.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 5,978,791	11/2/1999	PersonalWeb and Level 3 Communications
2 6,415,280	7/2/2002	PersonalWeb and Level 3 Communications
3 7,802,310	9/21/2010	PersonalWeb and Level 3 Communications
4		
5		

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY <input type="checkbox"/> Amendment <input type="checkbox"/> Answer <input type="checkbox"/> Cross Bill <input type="checkbox"/> Other Pleading		
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK	
1			
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3			
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In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE
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Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
 Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy

enforce and/or litigate the Patents-in-Suit in fields other than the Level 3 Exclusive Field (the “PersonalWeb Patent Field”).

3. All infringement allegations, statements describing PersonalWeb, statements describing any Defendant (or any Defendant’s products) and any statements made regarding jurisdiction and venue are made by PersonalWeb alone, and not by Level 3. PersonalWeb alleges that the infringements at issue in this case all occur within, and are limited to, the PersonalWeb Patent Field. Accordingly, PersonalWeb has not provided notice to Level 3—under Section 6.4.1 of the Agreement or otherwise—that PersonalWeb desires to bring suit in the Level 3 Exclusive Field in its own name on its own behalf or that PersonalWeb knows or suspects that Defendant is infringing or has infringed any of Level 3’s rights in the patents.

THE PARTIES

4. Plaintiff PersonalWeb Technologies, LLC is a limited liability company duly organized and existing under the laws of Texas with its principal place of business in Tyler, Texas.

5. Plaintiff Level 3 Communications, LLC is a limited liability company organized under the laws of Delaware with its principal place of business at 1025 Eldorado Boulevard, Broomfield, CO 80021.

6. PersonalWeb’s infringement claims asserted in this case are asserted by PersonalWeb and all fall outside the Level 3 Exclusive Field. Level 3 is currently not asserting patent infringement in this case in the Level 3 Exclusive Field against any Defendant.

7. PersonalWeb is informed and believes, and on that basis alleges, that Facebook is a California corporation with its principal place of business at 1601 Willow Rd., Menlo Park, CA 94025

JURISDICTION AND VENUE

8. The court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a) because this action arises under the patent laws of the United States, 35 U.S.C. §§ 1 *et seq.*

9. Venue is proper in this federal district pursuant to 28 U.S.C. §§ 1391(b)-(c) and 1400(b) because plaintiff PersonalWeb is a limited liability company incorporated in Smith County, Texas with its principal place of business in Tyler, Texas.

10. Defendant has done business in this District, has committed acts of infringement in this District, and continues to commit acts of infringement in this District, entitling PersonalWeb to relief.

PERSONALWEB BACKGROUND

11. PersonalWeb draws on its proprietary technology to innovate and develop software products, including a social learning platform and digital content management system.

12. PersonalWeb's software technology enhances the delivery of relevant content by using natural language and semantic analysis. Utilizing this technology, PersonalWeb has developed a product called StudyPods, which enables students to connect and collaborate online.

13. PersonalWeb also develops the Global File Registry digital content management system, an online database containing unique identifiers of millions of files collected on behalf of content owners and others. The registry is capable of identifying files that infringe copyrights and replacing them with other content.

INFRINGEMENT OF U.S. PATENT NO. 5,978,791

14. On November 2, 1999, United States Patent No. 5,978,791 (the "'791 patent") was duly and legally issued for an invention entitled "Data Processing System Using Substantially Unique Identifiers to Identify Data Items, Whereby Identical Data Items Have the Same Identifiers." PersonalWeb has an ownership interest in the '791 patent by assignment, including the exclusive right to enforce the '791 patent within the PersonalWeb Patent Field, and

continues to hold that ownership interest in the '791 patent. A true and correct copy of the '791 patent is attached hereto as Exhibit A.

15. Defendant has infringed and continues to infringe the '791 patent by its manufacture, use, sale, importation, and/or offer for sale of Facebook's services utilizing Defendant's social network content searching system and Defendant's storage and retrieval system for API-submitted advertising images within the PersonalWeb Patent Field, and its contributing to and inducement of others to manufacture, use, sell, import, and/or offer for sale infringing products. Defendant is liable for its infringement of the '791 patent pursuant to 35 U.S.C. § 271.

16. Defendant's acts of infringement have caused damage to PersonalWeb, and PersonalWeb is entitled to recover from Defendant the damages sustained by PersonalWeb as a result of Defendant's wrongful acts in an amount subject to proof at trial. Defendant's infringement of PersonalWeb's rights under the '791 patent will continue to damage PersonalWeb, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

INFRINGEMENT OF U.S. PATENT NO. 6,415,280

17. On July 2, 2002, United States Patent No. 6,415,280 (the "'280 patent") was duly and legally issued for an invention entitled "Identifying and Requesting Data in Network Using Identifiers Which Are Based On Contents of Data." PersonalWeb has an ownership interest in the '280 patent by assignment, including the exclusive right to enforce the '280 patent within the PersonalWeb Patent Field, and continues to hold that ownership interest in the '280 patent. A true and correct copy of the '280 patent is attached hereto as Exhibit B.

18. Defendant has infringed and continues to infringe the '280 patent by its manufacture, use, sale, importation, and/or offer for sale of Facebook's services utilizing Defendant's social network content searching system and Defendant's storage and retrieval system for API-submitted advertising images within the PersonalWeb Patent Field, and its contributing to and inducement of others to manufacture, use, sell, import, and/or offer for sale

infringing products. Defendant is liable for its infringement of the '280 patent pursuant to 35 U.S.C. § 271.

19. Defendant's acts of infringement have caused damage to PersonalWeb, and PersonalWeb is entitled to recover from Defendant the damages sustained by PersonalWeb as a result of Defendant's wrongful acts in an amount subject to proof at trial. Defendant's infringement of PersonalWeb's rights under the '280 patent will continue to damage PersonalWeb, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

INFRINGEMENT OF U.S. PATENT NO. 7,802,310

20. On September 21, 2010, United States Patent No. 7,802,310 (the "'310 patent") was duly and legally issued for an invention entitled "Controlling Access to Data in a Data Processing System." PersonalWeb has an ownership interest in the '310 patent by assignment, including the exclusive right to enforce the '310 patent within the PersonalWeb Patent Field, and continues to hold that ownership interest in the '310 patent. A true and correct copy of the '310 patent is attached hereto as Exhibit C.

21. Defendant has infringed and continues to infringe the '310 patent by its manufacture, use, sale, importation, and/or offer for sale of Facebook's services utilizing Defendant's social network content searching system and Defendant's storage and retrieval system for API-submitted advertising images within the PersonalWeb Patent Field, and its contributing to and inducement of others to manufacture, use, sell, import, and/or offer for sale infringing products. Defendant is liable for its infringement of the '310 patent pursuant to 35 U.S.C. § 271.

22. Defendant's acts of infringement have caused damage to PersonalWeb, and PersonalWeb is entitled to recover from Defendant the damages sustained by PersonalWeb as a result of Defendant's wrongful acts in an amount subject to proof at trial. Defendant's infringement of PersonalWeb's rights under the '310 patent will continue to damage

PersonalWeb, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

JURY DEMAND

23. PersonalWeb demands a trial by jury on all issues.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff PersonalWeb requests entry of judgment in its favor and against Defendant as follows:

- a) Declaration that Defendant has infringed directly, and/or indirectly, U.S. Patent Nos. 5,978,791, 6,415,280 and 7,802,310 as described in this action;
- b) Permanently enjoining Defendant and its respective officers, agents, employees, and those acting in privity with them, from further infringement, contributory infringement and/or inducing infringement of U.S. Patent Nos. 5,978,791, 6,415,280 and 7,802,310;
- c) Awarding the damages arising out of Defendant's infringement of U.S. Patent Nos. 5,978,791, 6,415,280 and 7,802,310, including enhanced damages pursuant to 35 U.S.C. § 284 together with prejudgment and post-judgment interest, in an amount according to proof;
- d) An award of attorneys' fees pursuant to 35 U.S.C. § 285 or as otherwise permitted by law; and
- e) For such other costs and further relief as the Court may deem just and proper.

DATED: September 17, 2012

Respectfully submitted,

By: /s/ Max L. Tribble, Jr.
Max L. Tribble, Jr.
State Bar No. 20213950
mtribble@susmangodfrey.com
SUSMAN GODFREY L.L.P.
1000 Louisiana Street, Suite 5100
Houston, Texas 77002
Telephone: (713) 651-9366
Facsimile: (713) 654-6666

Lead Attorney for Plaintiff
PersonalWeb Technologies, LLC

Joseph Grinstein
State Bar No. 24002188
jgrinstein@susmangodfrey.com
Ashley L. McMillian
State Bar No. 24070252
amcmillian@susmangodfrey.com
Sandeep Seth
State Bar No. 18043000
sseth@susmangodfrey.com
SUSMAN GODFREY L.L.P.
1000 Louisiana Street, Suite 5100
Houston, Texas 77002
Telephone: (713) 651-9366
Facsimile: (713) 654-6666

Marc M. Seltzer
CA State Bar No. 54534
mseltzer@susmangodfrey.com
Kalpana Srinivasan
CA State Bar No. 237460
ksrinivasan@susmangodfrey.com
SUSMAN GODFREY L.L.P.
1901 Ave of the Stars, Suite 950
Los Angeles, CA 90067

Justin A. Nelson
State Bar No. 24034766
jnelson@susmangodfrey.com
SUSMAN GODFREY L.L.P.
1201 Third Ave, Suite 3800
Seattle, WA 98101
Telephone: (206) 516-3880
Facsimile: (206) 516-3883

Attorneys for Plaintiff
PersonalWeb Technologies, LLC

/s/ David D. Wier

David D. Wier, Esq.
David.Wier@Level3.com
Vice President, Patent Counsel
LEVEL 3 COMMUNICATIONS, INC.
1025 Eldorado Boulevard
Broomfield, Colorado 80021

Attorney for Plaintiff
Level 3 Communications, LLC

TO: Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
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In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court For the Eastern District of Texas, Tyler Division on the following Trademarks or Patents. (the patent action involves 35 U.S.C. § 292.):

DOCKET NO. 6:12-cv-00658	DATE FILED 9/17/2012	U.S. DISTRICT COURT For the Eastern District of Texas, Tyler Division
PLAINTIFF PersonalWeb Technologies, LLC, and Level 3 Communications, LLC		DEFENDANT Yahoo! Inc.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 5,978,791	11/2/1999	PersonalWeb and Level 3 Communications
2 6,415,280	7/2/2002	PersonalWeb and Level 3 Communications
3 7,802,310	9/21/2010	PersonalWeb and Level 3 Communications
4		
5		

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY	
	<input type="checkbox"/> Amendment <input type="checkbox"/> Answer <input type="checkbox"/> Cross Bill <input type="checkbox"/> Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
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In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE
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Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
 Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy

enforce and/or litigate the Patents-in-Suit in fields other than the Level 3 Exclusive Field (the “PersonalWeb Patent Field”).

3. All infringement allegations, statements describing PersonalWeb, statements describing any Defendant (or any Defendant’s products) and any statements made regarding jurisdiction and venue are made by PersonalWeb alone, and not by Level 3. PersonalWeb alleges that the infringements at issue in this case all occur within, and are limited to, the PersonalWeb Patent Field. Accordingly, PersonalWeb has not provided notice to Level 3—under Section 6.4.1 of the Agreement or otherwise—that PersonalWeb desires to bring suit in the Level 3 Exclusive Field in its own name on its own behalf or that PersonalWeb knows or suspects that Defendant is infringing or has infringed any of Level 3’s rights in the patents.

THE PARTIES

4. Plaintiff PersonalWeb Technologies, LLC is a limited liability company duly organized and existing under the laws of Texas with its principal place of business in Tyler, Texas.

5. Plaintiff Level 3 Communications, LLC is a limited liability company organized under the laws of Delaware with its principal place of business at 1025 Eldorado Boulevard, Broomfield, CO 80021.

6. PersonalWeb’s infringement claims asserted in this case are asserted by PersonalWeb and all fall outside the Level 3 Exclusive Field. Level 3 is currently not asserting patent infringement in this case in the Level 3 Exclusive Field against any Defendant.

7. Defendant Yahoo! Inc. is, upon information and belief, a Delaware corporation with its principal place of business at 701 First Avenue, Sunnyvale, California 94089.

JURISDICTION AND VENUE

8. The court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a) because this action arises under the patent laws of the United States, 35 U.S.C. §§ 1 *et seq.*

9. Venue is proper in this federal district pursuant to 28 U.S.C. §§ 1391(b)-(c) and 1400(b) because plaintiff PersonalWeb is a limited liability company incorporated in Smith County, Texas with its principal place of business in Tyler, Texas.

10. Defendant has done business in this District, has committed acts of infringement in this District, and continues to commit acts of infringement in this District, entitling PersonalWeb to relief.

PERSONALWEB BACKGROUND

11. PersonalWeb draws on its proprietary technology to innovate and develop software products, including a social learning platform and digital content management system.

12. PersonalWeb's software technology enhances the delivery of relevant content by using natural language and semantic analysis. Utilizing this technology, PersonalWeb has developed a product called StudyPods, which enables students to connect and collaborate online.

13. PersonalWeb also develops the Global File Registry digital content management system, an online database containing unique identifiers of millions of files collected on behalf of content owners and others. The registry is capable of identifying files that infringe copyrights and replacing them with other content.

INFRINGEMENT OF U.S. PATENT NO. 5,978,791

14. On November 2, 1999, United States Patent No. 5,978,791 (the "'791 patent") was duly and legally issued for an invention entitled "Data Processing System Using Substantially Unique Identifiers to Identify Data Items, Whereby Identical Data Items Have the Same Identifiers." PersonalWeb has an ownership interest in the '791 patent by assignment, including the exclusive right to enforce the '791 patent within the PersonalWeb Patent Field, and

continues to hold that ownership interest in the '791 patent. A true and correct copy of the '791 patent is attached hereto as Exhibit A.

15. Defendant has infringed and continues to infringe the '791 patent by its manufacture, use, sale, importation, and/or offer for sale of its products and services within the PersonalWeb Patent Field utilizing Yahoo's search engine system, including but not limited to Defendant's search engine as powered by Bing, and its contributing to and inducement of others to manufacture, use, sell, import, and/or offer for sale infringing products. Defendant is liable for its infringement of the '791 patent pursuant to 35 U.S.C. § 271.

16. Defendant's acts of infringement have caused damage to PersonalWeb, and PersonalWeb is entitled to recover from Defendant the damages sustained by PersonalWeb as a result of Defendant's wrongful acts in an amount subject to proof at trial. Defendant's infringement of PersonalWeb's rights under the '791 patent will continue to damage PersonalWeb, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

INFRINGEMENT OF U.S. PATENT NO. 6,415,280

17. On July 2, 2002, United States Patent No. 6,415,280 (the "'280 patent") was duly and legally issued for an invention entitled "Identifying and Requesting Data in Network Using Identifiers Which Are Based On Contents of Data." PersonalWeb has an ownership interest in the '280 patent by assignment, including the exclusive right to enforce the '280 patent within the PersonalWeb Patent Field, and continues to hold that ownership interest in the '280 patent. A true and correct copy of the '280 patent is attached hereto as Exhibit B.

18. Defendant has infringed and continues to infringe the '280 patent by its manufacture, use, sale, importation, and/or offer for sale of its products and services within the PersonalWeb Patent Field utilizing Yahoo's search engine system, including but not limited to Defendant's search engine as powered by Bing, and its contributing to and inducement of others to manufacture, use, sell, import, and/or offer for sale infringing products. Defendant is liable for its infringement of the '280 patent pursuant to 35 U.S.C. § 271.

19. Defendant's acts of infringement have caused damage to PersonalWeb, and PersonalWeb is entitled to recover from Defendant the damages sustained by PersonalWeb as a result of Defendant's wrongful acts in an amount subject to proof at trial. Defendant's infringement of PersonalWeb's rights under the '280 patent will continue to damage PersonalWeb, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

INFRINGEMENT OF U.S. PATENT NO. 7,802,310

20. On September 21, 2010, United States Patent No. 7,802,310 (the "'310 patent'") was duly and legally issued for an invention entitled "Controlling Access to Data in a Data Processing System." PersonalWeb has an ownership interest in the '310 patent by assignment, including the exclusive right to enforce the '310 patent within the PersonalWeb Patent Field, and continues to hold that ownership interest in the '310 patent. A true and correct copy of the '310 patent is attached hereto as Exhibit C.

21. Defendant has infringed and continues to infringe the '310 patent by its manufacture, use, sale, importation, and/or offer for sale of its products and services within the PersonalWeb Patent Field utilizing Yahoo's search engine system, including but not limited to Defendant's search engine as powered by Bing, and its contributing to and inducement of others to manufacture, use, sell, import, and/or offer for sale infringing products. Defendant is liable for its infringement of the '310 patent pursuant to 35 U.S.C. § 271.

22. Defendant's acts of infringement have caused damage to PersonalWeb, and PersonalWeb is entitled to recover from Defendant the damages sustained by PersonalWeb as a result of Defendant's wrongful acts in an amount subject to proof at trial. Defendant's infringement of PersonalWeb's rights under the '310 patent will continue to damage PersonalWeb, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

JURY DEMAND

23. PersonalWeb demands a trial by jury on all issues.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff PersonalWeb requests entry of judgment in its favor and against Defendant as follows:

- a) Declaration that Defendant has infringed directly, and/or indirectly, U.S. Patent Nos. 5,978,791, 6,415,280 and 7,802,310 as described in this action;
- b) Permanently enjoining Defendant and its respective officers, agents, employees, and those acting in privity with them, from further infringement, contributory infringement and/or inducing infringement of U.S. Patent Nos. 5,978,791, 6,415,280 and 7,802,310;
- c) Awarding the damages arising out of Defendant's infringement of U.S. Patent Nos. 5,978,791, 6,415,280, and 7,802,310, including any enhanced damages pursuant to 35 U.S.C. § 284 together with prejudgment and post-judgment interest, in an amount according to proof;
- d) An award of attorneys' fees pursuant to 35 U.S.C. § 285 or as otherwise permitted by law; and
- e) For such other costs and further relief as the Court may deem just and proper.

DATED: September 17, 2012

Respectfully submitted,

By: /s/ Max L. Tribble, Jr.
Max L. Tribble, Jr.
State Bar No. 20213950
mtribble@susmangodfrey.com
SUSMAN GODFREY L.L.P.
1000 Louisiana Street, Suite 5100
Houston, Texas 77002
Telephone: (713) 651-9366
Facsimile: (713) 654-6666

Lead Attorney for Plaintiff
PersonalWeb Technologies, LLC

Joseph Grinstein
State Bar No. 24002188
jgrinstein@susmangodfrey.com
Ashley L. McMillian
State Bar No. 24070252
amcmillian@susmangodfrey.com
Sandeep Seth
State Bar No. 18043000
sseth@susmangodfrey.com
SUSMAN GODFREY L.L.P.
1000 Louisiana Street, Suite 5100
Houston, Texas 77002
Telephone: (713) 651-9366
Facsimile: (713) 654-6666

Marc M. Seltzer
CA State Bar No. 54534
mseltzer@susmangodfrey.com
Kalpana Srinivasan
CA State Bar No. 237460
ksrinivasan@susmangodfrey.com
SUSMAN GODFREY L.L.P.
1901 Ave of the Stars, Suite 950
Los Angeles, CA 90067

Justin A. Nelson
State Bar No. 24034766
jnelson@susmangodfrey.com
SUSMAN GODFREY L.L.P.
1201 Third Ave, Suite 3800
Seattle, WA 98101
Telephone: (206) 516-3880
Facsimile: (206) 516-3883

Attorneys for Plaintiff
PersonalWeb Technologies, LLC

/s/ David D. Wier
David D. Wier, Esq.
David.Wier@Level3.com
Vice President, Patent Counsel
LEVEL 3 COMMUNICATIONS, INC.
1025 Eldorado Boulevard
Broomfield, Colorado 80021

Attorney for Plaintiff
Level 3 Communications, LLC

TO: Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
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In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Eastern District of Texas - Tyler Division on the following

Trademarks or Patents. (the patent action involves 35 U.S.C. § 292.);

DOCKET NO. 6:11CV683	DATE FILED 12/19/2011	U.S. DISTRICT COURT Eastern District of Texas - Tyler Division
PLAINTIFF PERSONALWEB TECHNOLOGIES LLC		DEFENDANT Autonomy, Inc.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 5,978,791	11/2/1999	Personalweb Technologies, LLC
2 7,802,310	9/21/2010	Personalweb Technologies, LLC
3		
4		
5		

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY <input type="checkbox"/> Amendment <input type="checkbox"/> Answer <input type="checkbox"/> Cross Bill <input type="checkbox"/> Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
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In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE
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Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
 Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy

<p>TO:</p> <p style="text-align: center;">Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450</p>	<p>REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK</p>
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In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Eastern District of Texas - Tyler Division on the following Trademarks or Patents. (the patent action involves 35 U.S.C. § 292.):

DOCKET NO. 6:11CV656-LED	DATE FILED 12/8/2011	U.S. DISTRICT COURT Eastern District of Texas - Tyler Division
PLAINTIFF PERSONALWEB TECHNOLOGIES LLC		DEFENDANT Google Inc. and YouTube LLC
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 5,978,791	11/2/1999	Personalweb Technologies, LLC
2 6,415,280	7/2/2002	Personalweb Technologies, LLC
3 6,928,442	8/9/2005	Personalweb Technologies, LLC
4 7,802,310	9/21/2010	Personalweb Technologies, LLC
5 7,945,539	5/17/2011	Personalweb Technologies, LLC

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY		
	<input type="checkbox"/> Amendment	<input type="checkbox"/> Answer	<input type="checkbox"/> Cross Bill
	<input type="checkbox"/> Other Pleading		
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK	
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 Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy

PATENT OR TRADEMARK	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
7,949,662	05/24/2011	Personalweb Technologies, LLC
8,001,096	08/16/2011	Personalweb Technologies, LLC

PATENT OR TRADEMARK	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
7,949,662	05/24/2011	Personalweb Technologies, LLC
8,001,096	08/16/2011	Personalweb Technologies, LLC

PATENT OR TRADEMARK	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
7,949,662	05/24/2011	Personalweb Technologies, LLC
8,001,096	08/16/2011	Personalweb Technologies, LLC

TO: Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
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In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Eastern District of Texas - Tyler Division on the following Trademarks or Patents. (the patent action involves 35 U.S.C. § 292.):

DOCKET NO. 6:11CV659-LED	DATE FILED 12/8/2011	U.S. DISTRICT COURT Eastern District of Texas - Tyler Division
PLAINTIFF PERSONALWEB TECHNOLOGIES LLC		DEFENDANT Caringo, Inc.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 5,978,791	11/2/1999	Personalweb Technologies, LLC
2 6,415,280	7/2/2002	Personalweb Technologies, LLC
3 6,928,442	8/9/2005	Personalweb Technologies, LLC
4 7,802,310	9/21/2010	Personalweb Technologies, LLC
5 7,945,539	5/17/2011	Personalweb Technologies, LLC

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY <input type="checkbox"/> Amendment <input type="checkbox"/> Answer <input type="checkbox"/> Cross Bill <input type="checkbox"/> Other Pleading		
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK	
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In the above—entitled case, the following decision has been rendered or judgement issued:

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Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy

PATENT OR TRADEMARK	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
7,949,662	05/24/2011	Personalweb Technologies, LLC
8,001,096	08/16/2011	Personalweb Technologies, LLC

TO: Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
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In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Eastern District of Texas - Tyler Division on the following

Trademarks or Patents. (the patent action involves 35 U.S.C. § 292.)

DOCKET NO. 6:11CV655-LED	DATE FILED 12/8/2011	U.S. DISTRICT COURT Eastern District of Texas - Tyler Division
PLAINTIFF PERSONALWEB TECHNOLOGIES LLC		DEFENDANT NEC Corporation of America, Inc.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 5,978,791	11/2/1999	Personalweb Technologies, LLC
2 6,415,280	7/2/2002	Personalweb Technologies, LLC
3 6,928,442	8/9/2005	Personalweb Technologies, LLC
4 7,802,310	9/21/2010	Personalweb Technologies, LLC
5 7,945,539	5/17/2011	Personalweb Technologies, LLC

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

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PATENT OR TRADEMARK	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
7,949,662	05/24/2011	Personalweb Technologies, LLC
8,001,096	08/16/2011	Personalweb Technologies, LLC

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DOCKET NO. 6:11CV657-LED	DATE FILED 12/8/2011	U.S. DISTRICT COURT Eastern District of Texas - Tyler Division
PLAINTIFF PERSONALWEB TECHNOLOGIES LLC		DEFENDANT NetApp, Inc.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 5,978,791	11/2/1999	Personalweb Technologies, LLC
2 6,415,280	7/2/2002	Personalweb Technologies, LLC
3 6,928,442	8/9/2005	Personalweb Technologies, LLC
4 7,802,310	9/21/2010	Personalweb Technologies, LLC
5 7,945,539	5/17/2011	Personalweb Technologies, LLC

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY <input type="checkbox"/> Amendment <input type="checkbox"/> Answer <input type="checkbox"/> Cross Bill <input type="checkbox"/> Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
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PATENT OR TRADEMARK	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
7,949,662	05/24/2011	Personalweb Technologies, LLC
8,001,096	08/16/2011	Personalweb Technologies, LLC

TO: Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
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In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court For the Eastern District of Texas, Tyler Division on the following

Trademarks or Patents. (the patent action involves 35 U.S.C. § 292.):

DOCKET NO. 6:11-656	DATE FILED 12/8/2011	U.S. DISTRICT COURT For the Eastern District of Texas, Tyler Division
PLAINTIFF PersonalWeb Technologies, LLC		DEFENDANT Google Inc. and YouTube, LLC
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 5,978,791	11/2/1999	PersonalWeb Technologies, LLC
2 6,415,280	7/2/2002	PersonalWeb Technologies, LLC
3 6,928,442	8/9/2005	PersonalWeb Technologies, LLC
4 7,802,310	9/21/2010	PersonalWeb Technologies, LLC
5 See Attachment A		

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY <input type="checkbox"/> Amendment <input type="checkbox"/> Answer <input type="checkbox"/> Cross Bill <input type="checkbox"/> Other Pleading		
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 Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION**

PERSONALWEB TECHNOLOGIES, LLC.

Plaintiff,

vs.

GOOGLE INC. AND YOUTUBE, LLC.

Defendants.



Civil Action No.

JURY TRIAL DEMANDED

**ATTACHMENT A TO REPORT ON THE FILING OR
DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK**

Patent or Trademark No.	Date of Patent or Trademark	Holder of Patent or Trademark
5. 7,945,539	5/17/ 2011	PersonalWeb Technologies, LLC
6. 7,945,544	5/17/2011	PersonalWeb Technologies, LLC
7. 7,949,662	5/24/2011	PersonalWeb Technologies, LLC
8. 8,001,096	8/16/2011	PersonalWeb Technologies, LLC



APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/980,687	09/21/2010	7802310	2618-0017	6761

75948 7590 09/01/2010
DAVIDSON BERQUIST JACKSON & GOWDEY, LLP
ATTN: BRIAN SIRITZKY, Ph.D.
4300 WILSON BLVD., 7TH FLOOR
ARLINGTON, VA 22203

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment is 79 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

David A. Farber, Ojai, CA;
Ronald D. Lachman, Northbrook, IL;



NOTICE OF ALLOWANCE AND FEE(S) DUE

75948 7590 07/22/2010

DAVIDSON BERQUIST JACKSON & GOWDEY, LLP
ATTN: BRIAN SIRITZKY, Ph.D.
4300 WILSON BLVD., 7TH FLOOR
ARLINGTON, VA 22203

EXAMINER: LEMMA, SAMSON B
ART UNIT: 2432 PAPER NUMBER:
DATE MAILED: 07/22/2010

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.

11/980,687 10/31/2007 David A. Farber 2618-0017 6761

TITLE OF INVENTION: CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM

Table with 7 columns: APPLN. TYPE, SMALL ENTITY, ISSUE FEE DUE, PUBLICATION FEE DUE, PREV. PAID ISSUE FEE, TOTAL FEE(S) DUE, DATE DUE

nonprovisional NO \$1510 \$0 \$1510 \$1510 10/22/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 or Fax (571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

75948 7590 07/22/2010

DAVIDSON BERQUIST JACKSON & GOWDEY, LLP
 ATTN: BRIAN SIRITZKY, Ph.D.
 4300 WILSON BLVD., 7TH FLOOR
 ARLINGTON, VA 22203

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/980,687	10/31/2007	David A. Farber	2618-0017	6761

TITLE OF INVENTION: CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$1510	\$1510	10/22/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
LEMMMA, SAMSON B	2432	726-028000

<p>1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</p> <p><input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</p> <p><input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.</p>	<p>2. For printing on the patent front page, list</p> <p>(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____</p> <p>(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____</p> <p>3 _____</p>
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3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE _____ (B) RESIDENCE: (CITY AND STATE OR COUNTRY) _____

Please check the appropriate assignee category or categories (will not be printed on the patent) : Individual Corporation or other private group entity Government

<p>4a. The following fee(s) are submitted:</p> <p><input type="checkbox"/> Issue Fee</p> <p><input type="checkbox"/> Publication Fee (No small entity discount permitted)</p> <p><input type="checkbox"/> Advance Order - # of Copies _____</p>	<p>4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)</p> <p><input type="checkbox"/> A check is enclosed.</p> <p><input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.</p> <p><input type="checkbox"/> The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).</p>
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5. Change in Entity Status (from status indicated above)

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. 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, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
11/980,687 10/31/2007 David A. Farber 2618-0017 6761

75948 7590 07/22/2010

DAVIDSON BERQUIST JACKSON & GOWDEY, LLP
ATTN: BRIAN SIRITZKY, Ph.D.
4300 WILSON BLVD., 7TH FLOOR
ARLINGTON, VA 22203

EXAMINER

LEMMA, SAMSON B

ART UNIT PAPER NUMBER

2432

DATE MAILED: 07/22/2010

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 79 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 79 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No. 11/980,687	Applicant(s) FARBER ET AL.	
Examiner Samson B. Lemma	Art Unit 2432	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. This communication is responsive to RCE filed on 07/06/2010.
- 2. The allowed claim(s) is/are 1-87.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____.
 - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 - 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
- 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
- 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- 6. Interview Summary (PTO-413), Paper No./Mail Date _____.
- 7. Examiner's Amendment/Comment
- 8. Examiner's Statement of Reasons for Allowance
- 9. Other _____.

/Samson B Lemma/
Examiner, Art Unit 2432

/Gilberto Barron Jr./
Supervisory Patent Examiner, Art Unit 2432

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 17/14/2010 has been entered.

Information Disclosure Statement

2. The information disclosure statements (IDS) submitted on 07/06/2010 and 07/09/2010 have been considered. The submission is in compliance with the provisions of 37 CFR 1.97. Form PTO-1449 is signed and attached hereto.

Allowable Subject Matter

3. **Claims 1-87** are allowed
4. The following is an examiner's statement of reasons for allowance:
5. A close review of the prior arts submitted on 07/06/2010 with the IDS and the additional reference 50/50212 to Dyson, revealed that, the

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limitations recited in the independent claims **1, 20, 21, 24, 66-71, 81 and 86** are still distinct from the prior art listed in the IDS.

Reference, US Patent 6,816,872 and 5,479,654 to Squibb, submitted with IDS, unlike the current application, is **focused on the** techniques for representing file differences useful in computer file protect systems and other systems, and more particularly to file transfer techniques useful in an electronic data backup system wherein only changes in a file are periodically sent to the backup system and in other systems. This is achieved by maintaining duplicate files in safe places. A SCAN computer program creates a TOKEN Table of an earlier file. The TOKEN Table reflects the indices of successive segments of the file and the exclusive-or (XR) and Cyclic redundancy check (CRC) products of the characters in each segment. An updated file is compared to the earlier file by comparing the XR and CRC products of segments in the updated file to the XR and CRC products in the TOKEN Table. On detecting matching products for identical segments, the next segments are compared. On mismatch, the segment (window) for the updated file is bumped one character and new XR and CRC products generated and compared. The indices of the TOKEN Table and the offsets from the start of the file of the first characters of the updated file matching segments are set forth in a Match Table. Next the updated file is scrolled through for the non-matching information determined by acting on the indices and offsets of the Match Table to form the TRANSITION Table which is the Match Table and the updated file non-matching information. The TRANSITION Table

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contains the delta information which may be sent to another location having a copy of the earlier file thereat: the whole updated file need not be sent there. A reconstruction program at the location looks at the TRANSITION Table to determine where to get the characters for the copy of the updated file it is creating.

The next reference, US Patent 5,530,757 to Krawczyk, submitted with IDS, unlike the current application, is **focused on the** method and apparatus for determining when a original document has been altered. With this invention the original information in the document is hashed using a one-way hash function. The hashed information is then encoded into a number of fingerprint pieces which are then transmitted to a number of locations. To verify the originality of the document a minimum number of fingerprint pieces are decoded and the purported genuine document is hashed using the one-way hash function. If the results of the latter hash equal the results of decoding the minimum number of fingerprint pieces, then the purported document is accepted as the genuine document.

The next reference, US Patent 5,454,00 to Dofman, submitted with IDS, unlike the current application, is focused on a system and method for verifying the integrity of files, and in particular executable files on a server workstation in a distributed computing network. In one form, verification is accomplished by selecting random or pseudo-random sections of the file, both as to the location and size, and comparing check

Art Unit: 2432

code results for those sections with corresponding calculations of check codes for a secure master file. In the context of a network, the objective is to verify the integrity of the executable file, typically located in an unsecure server computer, and once so verified transmit over a relatively secure communication network confidential data to be used by the executable file. The systems and methods for practicing the invention in a distributed computing network involving communication, using relative security protocols, between a dispatcher workstation and a server workstation and resources to generate and compare random or pseudo-random number pairs which define sections of the executable file subject to authentication. The comparison involves check code computations for the sections defined by the number pairs as appears in the server computer file as well as a master executable file in the dispatcher computer. A comparison of the check codes determines the integrity of the executable file in the server computer.

Reference, US Patent 5,448,668 to Perelson, submitted with IDS, unlike the current application, is focused on to a method to detect changes to a collection of digital signals, such as that stored or used in a computer. More particularly, the present invention relates to a method of detecting changes in a computer file caused by, for example, virus or other forms of unauthorized alteration.

The next reference, US Patent 5,694,472 to Johnson, submitted with IDS, unlike the current application, is focused on or relates

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generally to transactional, communication, and authorization systems, and more particularly to a multi-component system which implements unique recognition and comprehension methodologies to verify party identities and to ensure session security. Specifically, the user and provider devices implement unique recognition and comprehension methodologies to ensure that the parties are authorized to communicate with each other and to ensure that the information exchanged cannot be understood by third parties. Overall, the system provides a highly secure mechanism for transferring information from one party to another.

However, the all above references including the Dyson reference (US Patent No. 5050212) which is also cited on the office action submitted with IDS is distinct from the current application because the current application is focused on sending/getting/transmitting a hash value of the content with the request from first computer at the first location to the second remote computer at the second location in the network; for the purpose of accessing the stored content at the remote location. In other words the current application is focused on (a) obtaining a list of content-dependent names, one for each of a plurality of data items, wherein, for each particular data item of the plurality of data items, the corresponding content-dependent name for that particular data item is based at least in part on a function of at least some of the contents of the particular data item, wherein the function comprises a message digest function or a

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hash function, and wherein two identical data items have the same content-dependent name on the list of content-dependent names;

(b) receiving at a first location, and from a second location distinct from said first location, a content-dependent identifier corresponding to a particular requested data item, said content-dependent identifier being based at least in part on at least some of the contents of the particular data item

c) at said first location, by a processor, by hardware in combination with software, determining, based at least in part on said content-dependent identifier for said particular data item, and using said list of content-dependent names, whether a requestor may access the particular requested data item; and

(d) based on said determining in (c), if it is determined that the requestor may not access the particular requested data item, causing access to the particular requested data item to be denied.

None of the prior art of record taken singularly or in combination teaches or suggests applicant's invention in particular a method of secure communication of digital data between a first device and a second device devices, said method comprising the functional limitations recited in the respective independent claims **1, 20, 21, 24, 66-71, 81 and 86.**

For this reason, independent claims **1, 20, 21, 24, 66-71, 81 and 86** are still found to be novel and are allowed in view of the references submitted with IDS on 06/17/2010.

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6. The dependent **claims** which are dependent on the above **independent claims** being further limiting to the independent claim, definite and enabled by the specification are also allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submission should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samson B Lemma whose telephone number is 571-272-3806. The examiner can normally be reached on Monday-Friday (8:00 am---4: 30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BARRON JR GILBERTO can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

/Samson B Lemma/
Examiner, Art Unit 2432

/Gilberto Barron Jr./
Supervisory Patent Examiner, Art Unit 2432

Index of Claims 	Application/Control No. 11980687	Applicant(s)/Patent Under Reexamination FARBER ET AL.
	Examiner Samson B Lemma	Art Unit 2432

✓	Rejected
=	Allowed


-	Cancelled
÷	Restricted

N	Non-Elected
I	Interference

A	Appeal
O	Objected

Claims renumbered in the same order as presented by applicant
 CPA
 T.D.
 R.1.47

CLAIM		DATE									
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Index of Claims 	Application/Control No. 11980687	Applicant(s)/Patent Under Reexamination FARBER ET AL.
	Examiner Samson B Lemma	Art Unit 2432

✓	Rejected
=	Allowed


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Claims renumbered in the same order as presented by applicant
 CPA
 T.D.
 R.1.47

CLAIM		DATE							
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Index of Claims 	Application/Control No. 11980687	Applicant(s)/Patent Under Reexamination FARBER ET AL.
	Examiner Samson B Lemma	Art Unit 2432

✓	Rejected
=	Allowed


-	Cancelled
÷	Restricted

N	Non-Elected
I	Interference

A	Appeal
O	Objected

Claims renumbered in the same order as presented by applicant
 CPA
 T.D.
 R.1.47


CLAIM		DATE							
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Issue Classification 	Application/Control No. 11980687	Applicant(s)/Patent Under Reexamination FARBER ET AL.
	Examiner Samson B Lemma	Art Unit 2432

ORIGINAL						INTERNATIONAL CLASSIFICATION												
CLASS			SUBCLASS			CLAIMED					NON-CLAIMED							
726			28			H	0	4	L	29 / 06 (2006.01.01)								
CROSS REFERENCE(S)						G	0	6	F	21 / 00 (2006.0)								
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)																	
711	163																	

<input checked="" type="checkbox"/> Claims renumbered in the same order as presented by applicant <input type="checkbox"/> CPA <input type="checkbox"/> T.D. <input type="checkbox"/> R.1.47															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
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	2		18		34		50		66		82				
	3		19		35		51		67		83				
	4		20		36		52		68		84				
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	14		30		46		62		78						
	15		31		47		63		79						
	16		32		48		64		80						

/Samson B Lemma/ Examiner.Art Unit 2432 (Assistant Examiner)	07/14/2010 (Date)	Total Claims Allowed: 87	
/Gilberto Barron Jr./ Supervisory Patent Examiner.Art Unit 2432 (Primary Examiner)	07/18/2010 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 1(a)

Search Notes 	Application/Control No. 11980687	Applicant(s)/Patent Under Reexamination FARBER ET AL.
	Examiner Samson B Lemma	Art Unit 2432

SEARCHED			
Class	Subclass	Date	Examiner
726	27,28, 29	07/14/2010	SL
713	181	07/14/2010	SL

SEARCH NOTES		
Search Notes	Date	Examiner
713/\$, 726/\$ (With text Search)	07/14/2010	SL
EAST (Search is Updated and Interference Search is done)	07/14/2010	SL
NPL (IEEE, ACM DIGITAL LIBRARY, GOOGLE, CITeseer)	07/14/2010	SL
Inventor's name Search, the following patents have been examined. (6928442, 6415280, 5978791, 6928442, 6415280 and 5978791) and TD is filed.	07/14/2010	SL

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner
Interference Search History Printout	Interference Search History Printout	07/14/2010	SL

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 1 of 2	Application No.	11/980,687
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2432
	Examiner Name	LEMMA, SAMSON B.
	Attorney Docket No.	2618-0017
	Confirmation No.	6761

U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No.	Document No.	Publication/ Issue Date	Name of Patentee or Applicant of Cited Document
/S.L./	1-1	US-5448668	09-1995	Perelson et al.
/S.L./	1-2	US-5454000	09-1995	Dorfman, Barry L.
/S.L./	1-3	US-5479654	12-1995	Squibb, Mark
/S.L./	1-4	US-5530757	06-1996	Krawczyk, Hugo M.
/S.L./	1-5	US-5694472	12-1997	Johnson et al.
/S.L./	1-6	US-6816872	11-2004	Squibb, Mark
	1-7			
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	1-24			
	1-25			
	1-26			

Examiner Signature	/Samson Lemma/	Date Considered	07/17/2010
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

/S.L./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 2 of 2	Application No.	11/980,687
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2432
	Examiner Name	LEMMA, SAMSON B.
	Attorney Docket No.	2618-0017
	Confirmation No.	6761

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
/S.L./	2-1	USPTO, Non-Final Office Action mailed 07/02/2010 in U.S. Appln. No. 11/980,688 (Examiner Pham, Khanh B.)	
	2-2		
	2-3		
	2-4		
	2-5		
	2-6		
	2-7		

Examiner Signature	/Samson Lemma/	Date Considered	07/17/2010
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant. Notes: If identified, the following is provided: EA = English Abstract, T = Translation, PT = Partial Translation, SOR = Statement of Relevancy, PF = Patent Family.

Notice of References Cited	Application/Control No. 11/980,688	Applicant(s)/Patent Under Reexamination FARBER ET AL.	
	Examiner Khanh B. Pham	Art Unit 2166	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,816,872	11-2004	Squibb, Mark	1/1
*	B	US-5,530,757	06-1996	Krawczyk, Hugo M.	713/188
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	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 1 of 1	Application No.	11/980,688 11/980,687
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2166 2432
	Examiner Name	DHAM, Khanh B. Samson Lemna
	Attorney Docket No.	2618-0021
Confirmation No.	6768	

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Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
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	1-2	WIPO, International Preliminary Examination Report (IPER), July, 1997, PCT/US96/04733 [5 pgs.]	
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Examiner Signature	/Khanh Pham/	Date Considered	06/22/2010
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant. Notes: If identified, the following is provided: EA = English Abstract, T = Translation, PT = Partial Translation, SOR = Statement of Relevancy, PF = Patent Family.



INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 1 of 17	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No.	Document No.	Publication/ Issue Date	Name of Patentee or Applicant of Cited Document
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	1-3	US-3668647	June 1972	Evangelisti et al.
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	1-5	US-4290105	September 1981	Cichelli et al.
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<p align="center">INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p align="center">Sheet 2 of 17</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No.	Document No.	Publication/ Issue Date	Name of Patentee or Applicant of Cited Document
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<p align="center">INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p align="center">Sheet 3 of 17</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No.	Document No.	Publication/ Issue Date	Name of Patentee or Applicant of Cited Document
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<p align="center">INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p align="center">Sheet 4 of 17</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Document No.	Publication Date	Name of Patentee or Applicant of Cited Document	T ¹
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<p align="center">INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p align="center">Sheet 5 of 17</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	T ¹
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 6 of 17	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	T ¹
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	6-2	Berners-Lee, T. et al., "Hypertext Transfer Protocol -- HTTP/1.0," May 1996, pp. 1-54.	
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<p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p>Sheet 7 of 17</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
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<p align="center">INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p align="center">Sheet 8 of 17</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	T ¹
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	8-2	Davis, James R., "A Server for a Distributed Digital Technical Report Library," January 15, 1994, pp. 1-8.	
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	8-9	Defendant MediaSentry, Inc.'s Answer to Plaintiffs' First Amended Complaint and Counterclaims, dated February 8, 2005, from Civil Action No. CV04-7456 JFW (CTx)	
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 GOOG-1002-Page 94 of 422

<p align="center">INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p align="center">Sheet 9 of 17</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	T ¹
	9-1	Defendants Loudeye Corp.'s and Overpeer, Inc.'s Answer to Plaintiffs' First Amended Complaint and Counterclaim, dated February 8, 2005, from Civil Action No. 04-7456 JFW (AJWx)	
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 GOOG-1002-Page 95 of 422

<p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p>Sheet 10 of 17</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	T ¹
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	10-5	Grigni, Michelangelo, et al. "Tight Bounds on Minimum Broadcasts Networks." SIAM Journal of Discrete Mathematics, vol. 4, No. 2, May 1991, pp. 207-222.	
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¹Translation provided.

<p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p>Sheet 11 of 17</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	T ¹
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¹Translation provided.

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ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.L./

<p align="center">INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p align="center">Sheet 12 of 17</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	T ¹
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	12-3	Memorandum of Points and Authorities in Support of Loudeye's and Overpeer's Motion to Dismiss the First Amended Complaint for Failure to State a Claim or, In the Alternative, for a More Definitive Statement, dated December 13, 2004, from Civil Action No. CV-04-7456 JFW (A.W.X)	
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<p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p>Sheet 13 of 17</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
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NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	T ¹
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	13-10	Plaintiffs' Memorandum of Points and Authorities in Opposition to Loudeye Defendants' Motion to Dismiss, dated November 8, 2004, from Civil Action No. CV-04-7456 JFW (AJWX)	

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¹Translation provided.

<p align="center">INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p align="center">Sheet 14 of 17</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	T ¹
	14-1	Plaintiffs' Opposition to Media Sentry's Motion to Dismiss; Memorandum of Points and Authorities in Support Thereof, dated November 8, 2004, from Civil Action No. CV 04-7456 JFW (CTx)	
	14-2	Plaintiffs' Opposition to Recording Industry Association of America's Motion to Dismiss; Memorandum of Points and Authorities in Support Thereof, dated November 8, 2004, from Civil Action No. CV-04-7456 JFW (CTx)	
	14-3	Plaintiff's Reply to Defendant Loudeye Corp.'s and Overpeer, Inc.'s Counterclaims, dated March 3, 2005, from Civil Action No. CV 04-7456 JFW (CTx)	
	14-4	Plaintiff's Reply to Defendant MediaSentry's Counterclaims, dated March 3, 2005, from Civil Action No. CV 04-7456 JFW (CTx)	
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<p align="center">INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p align="center">Sheet 15 of 17</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

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 GOOG-1002-Page 101 of 422

<p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p>Sheet 16 of 17</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
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Examiner Signature		Date Considered	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 17 of 17	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	T ¹
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Examiner Signature	/Khanh Pham/	Date Considered	06/22/2010
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<p align="center">INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p align="center">Sheet 1 of 14</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No.	Document No.	Publication/ Issue Date	Name of Patentee or Applicant of Cited Document
	1-1	US-2002/0082999	27-Jun-02	Lee, Cheol-Woong ; et al.
	1-2	US-2002-0052884	2001/11/15	Farber et al.
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<p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p>Sheet 2 of 14</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

U.S. PATENT DOCUMENTS				
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<p align="center">INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p align="center">Sheet 3 of 14</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

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Examiner Signature		Date Considered	
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<p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p>Sheet 4 of 14</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Document No.	Publication Date	Name of Patentee or Applicant of Cited Document	Notes
	4-1	EP 0 268 069 A2	May 25, 1988	IBM	
	4-2	EP 0 315 425	May 10, 1989	XEROX	
	4-3	EP 0 558 945 A2	Sep. 8, 1993	IBM	
	4-4	EP 0 566 967 A2	Oct. 27, 1993	IBM	
	4-5	EP 0 654 920 A2	May 24, 1995	Fischer	
	4-6	EP 0 658 022 A2	June 14, 1995	IBM	
	4-7	EP 0631 226 A1	Dec. 28, 1994	IBM	
	4-8	JP 06187384 A2	July 8, 1994	Texas Instruments Inc.	
	4-9	JP 06348558 A	Dec. 22, 1994	Toshiba Corp.	
	4-10	JP 2-127755	May 16, 1990	Digital Equip Corp.	
	4-11	JP 63-106048	May 11, 1988	NEC Corp.	
	4-12	JP 63-273961	Nov. 11, 1988	NEC Corp.	
	4-13	JP-59058564	1984/04/04	KOICHI, Iikura	
	4-14	WO 92/20021	Nov. 12, 1992	DEC	
	4-15	WO 94/06087	Mar. 17, 1994	Nuttall	
	4-16	WO 94/20913	Sept. 15, 1994	Bader	
	4-17	WO 95/01599	Jan. 12, 1995	Woodhill	
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ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /K.P./

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.L./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 5 of 14	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	5-1	[Proposed] Order Regarding Construction of Terms, filed Mar. 29, 2007 in C.D. Cal. case no. CV 06-5086 SJO (Ex) [9 pgs.]	
	5-2	Analysis of Plaintiffs' Claim Chart for the '280 Patent As Against Defendant Media Sentry, Inc. 11 pages	
	5-3	Analysis of Plaintiffs' Claim Chart for the '791 Patent As Against Defendant Media Sentry, Inc. (11916.001.0150.a) pp. 1-48	
	5-4	Analysis of Plaintiffs' Claim Chart for the '791 Patent As Against Defendant Overpeer pp. 1-40	
	5-5	BARBARA, D., et al., "Exploiting symmetries for low-cost comparison of file copies," 8th Int'l Conf. on Distributed Computing Systems, June 1988, pgs. 471-479, San Jose, CA.	
	5-6	CAMPBELL, M., "The Design of Text Signatures for Text Retrieval Systems," Tech. Report, Sept. 5, 1994, Deakin University, School of Computing & Math., Geelong, Australia.	
	5-7	CHANG, W. W. et al., "A signature access method for the Starburst database system," in Proc. 15th Int'l Conf. on Very Large Data Bases (Amsterdam, The Netherlands), pgs. 145-153.	

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<p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p>Sheet 6 of 14</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	6-1	Changes to March 23, 2007 Deposition of Robert B. K. Dewar, in C.D. Cal. case no. CV 06-5086 SJO (Ex) [3 pgs + cover letter.]	
	6-2	Communication from EPO in European Application No. 96 910 762.2 - 1225 dated May 8, 2009 [4 pgs.]	
	6-3	Communication pursuant to Article 96(2) EPC from EPO (Examination Report), Jan. 17, 2007, in Application No. EP 96 910 762.2 -1225 [1 pg. with 5 pg. annex].	
	6-4	Complaint for Patent Infringement, Permanent Injunction and Damages, Aug. 8, 2006, in C.D. Cal. case no. CV 06-5086 SJO (Ex) [11 pgs.]	
	6-5	Complaint for Patent Infringement, Permanent Injunction and Damages, filed 09/21/2007 in C.D. Cal. Case No. CV 07-06161 VBF (PLAx) [10 pgs.]	
	6-6	Declaration of Charles S. Baker in Support of Defendant Lime Wire's Motion to Stay Pending Reexamination of Patent and Request for Extension of Deadlines, Aug. 29, 2008, in C.D. Cal. Case No. CV 07-06161 VBF (PLAx) [2 pgs.]	
	6-7	Defendant Lime Wire, LLC's First Amended Answer, Affirmative Defenses and Counterclaims, October 2, 2008, C.D. Cal. case No. 07-06161 VBF (PLAx) [13 pgs.]	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 7 of 14	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	7-1	Defendant Lime Wire, LLC's Second Amended Answer, Affirmative Defenses and Counterclaims, October 27, 2008, from C.D. Cal. case No. 07-06161 VBF (PLAx) [13 pgs.]	
	7-2	Defendant Michael Weiss's Answer to Plaintiff's Complaint for Patent Infringement, Permanent Injunction and Damages; Demand for Jury Trial, Sept. 15, 2006, case no. CV 06-5086 SJO (Ex) [10 pgs.]	
	7-3	Defendant Recording Industry Association of America's Amended Notice of Motion and Motion for Partial Summary Judgment on Plaintiffs' Claims for Patent Infringement and Inducing Patent Infringement; Memorandum of Points and Authorities, May 22, 2006, redacted, original confidential, filed under seal, in C.D. Cal. case no. CV 04-7456 JFW (CTx) [19 pgs.]	
	7-4	Defendant Recording Industry Association of America's and Mediasentry, Inc.'s Notice of Motion and Motion for Partial Summary Judgment Based on Implied License or, In the Alternative, Based on Patent Misuse and Unclean Hands, May 22, 2006, Redacted, in C.D. Cal. case no. CV 04-7456 JFW (CTx) [21 pgs.]	
	7-5	Defendant Recording Industry Association of America's and Mediasentry, Inc.'s Notice of Motion and Motion for Partial Summary Judgment Based on Implied License or, In the Alternative, Based on Patent Misuse and Unclean Hands, May 8, 2006, in C.D. Cal. case no. CV 04-7456 JFW (CTx) [20 pgs.]	
	7-6	Defendant StreamCast Networks Inc.'s Answer to Plaintiff's Complaint for Patent Infringement, Permanent Injunction and Damages; Demand for Jury Trial, Sept. 5, 2006, C.D. Cal. case no. CV 06-5086 SJO (Ex) [10 pgs.]	
	7-7	Defendants' Amended Preliminary Claim Constructions [Patent Rule 4-2], filed Feb. 7, 2007 in C.D. Cal. case no. CV 06-5086 SJO (Ex) [10 pgs.]	

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<p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p>Sheet 8 of 14</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	8-1	Defendant's Second Amended Preliminary Claim Constructions [Patent Rule 4-2], filed Feb. 9, 2007 in C.D. Cal. case no. CV 06-5086 SJO (Ex) [10 pgs.]	
	8-2	DEWAR, Rebuttal Expert Report of Robert B.K. Dewar, in C.D. Cal. case no. CV 04 -7456 JFW (CTx), April 10, 2006 [87 pgs].	
	8-3	FALOUTSOS, C. "Access methods for text," ACM Comput. Surv. 17, 1 (Mar. 1985), 49-74.	
	8-4	FALOUTSOS, C. et al., "Description and performance analysis of signature file methods for office filing," ACM Trans. Inf. Syst. 5, 3 (Jul. 1987), 237-257.	
	8-5	FALOUTSOS, C. et al., "Signature files: an access method for documents and its analytical performance evaluation," ACM Trans. Inf. Syst. 2, 4 (Oct. 1984), 267-288.	
	8-6	Federal Information Processing Standards (FIPS) Publication 180-1; Secure Hash Standard, April 17, 1995 [17 pgs.]	
	8-7	FEIGENBAUM, J. et al., "Cryptographic protection of databases and software," in Distributed Computing and Cryptography: Proc. DIMACS Workshop, April, 1991, pgs 161-172, American Mathematical Society, Boston, Mass.	

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<p align="center">INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p align="center">Sheet 9 of 14</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	9-1	First Amended Answer of Defendant Mediasentry to Second Amended Complaint and Counterclaim, April 24, 2006, in C.D. Cal. case no. CV 04-7456 JFW (CTx) [29 pgs.]	
	9-2	First Amended Answer of Defendant RIAA to Second Amended Complaint and Counterclaim, April 24, 2006, in C.D. Cal. Case no. CV 04-7456 JFW (CTx) [27 pgs.]	
	9-3	First Amended Complaint for Patent Infringement, Permanent Injunction and Damages, filed 09/08/2008 in C.D. Cal. Case No. CV 07-06161 VBF (PLAx) [10 pgs.]	
	9-4	HARRISON, M. C., "Implementation of the substring test by hashing," Commun. ACM 14, 12 (Dec. 1971), 777-779.	
	9-5	IEEE, The Authoritative Dictionary of IEEE Standards Terms, 7th ed., Copyright 2000, pgs. 107, 176, 209, 240, 241, 432, 468, 505, 506, 682, 1016, 1113, 1266, and 1267.	
	9-6	ISHIKAWA, Y., et al., "Evaluation of signature files as set access facilities in OODBs," In Proc. of the 1993 ACM SIGMOD Inter. Conf. on Management of Data (Washington, D.C., U.S., May, 1993). P. Buneman & S. Jajodia, Eds. SIGMOD '93. ACM, NY, NY, 247-256.	
	9-7	Joint Claim Construction and Prehearing Statement, N.D. Cal. Rule 4-3, Feb. 12, 2007, in C.D. Cal. case no. CV 06-5086 SJO (Ex) [20 pgs.]	

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<p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p>Sheet 10 of 14</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	10-1	KARP, R. M. and Rabin, M. O., "Efficient randomized pattern-matching algorithms," IBM J. Res. Dev. 31, 2 (Mar. 1987), 249-260.	
	10-2	List of Asserted Claims and Infringement Chart for Each Asserted Claim, July 28, 2008, in C.D. Cal. Case No. CV 07-06161 VBF (PLAx) [31 pgs.]	
	10-3	MCGREGOR D. R. and MARIANI, J. A. "Fingerprinting - A technique for file identification and maintenance," SOFTWARE: PRACTICE AND EXPERIENCE, vol. 12, no. 12, December 1982 (1982-12), pages 1165-1166	
	10-4	Notice of Interested Parties, filed 09/21/2007 in C.D. Cal. Case No. CV 07-06161 VBF (PLAx) [2 pgs.]	
	10-5	Notice of Motion and Motion of Defendant Lime Wire to Stay Litigation Pending Reexamination of Patent and Request for Extension of Deadlines, Sept. 22, 2008, C.D. Cal. Case No. CV 07-06161 VBF (PLAx) [11 pgs.]	
	10-6	Notice of Related Cases, filed 09/21/2007 in C.D. Cal. Case No. CV 07-06161 VBF (PLAx) [2 pgs.]	
	10-7	PANAGOPOULOS, G., et al., "Bit-sliced signature files for very large text databases on a parallel machine architecture," In Proc. of the 4th Inter. Conf. on Extending Database Technology (EDBT), Cambridge, U.K., March 1994, pgs. 379 - 392 (Proc. LNCS 779 Springer 1994, ISBN 3-540-57818-8) [14 pgs.]	

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<p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p>Sheet 11 of 14</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	11-1	Patent Abstract, " Management System for Plural Versions," Pub. No. 63273961 A, published Nov. 11, 1988, NEC Corp.	
	11-2	Patent Abstracts of Japan, "Data Processor," Appln. No. 05135620, filed June 7, 1993, Toshiba Corp.	
	11-3	Plaintiff Kinetech, Inc.'s Responses to Defendant Mediasentry's First set of Interrogatories, May 1, 2006, in C.D. Cal. Case no. CV 04-7456 JFW (CTx) [14 pgs.]	
	11-4	Plaintiff-Counterclaim Defendant Altnet, Inc.'s Supplemental Responses to Defendant-Counterclaim Plaintiff Overpeer Inc.'s First Set of Interrogatories, March 8, 2006, redacted, in C.D. Cal. case no. CV 04-7456 JFW (CTx) [24 pgs.]	
	11-5	Plaintiff-Counterclaim Defendant Brilliant Digital Entertainment, Inc.'s Supplemental Responses to Defendant-Counterclaim Plaintiff Overpeer Inc.'s First Set of Interrogatories, March 8, 2006, redacted, in C.D. Cal. case no. CV 04-7456 JFW (CTx) [24 pgs.]	
	11-6	Plaintiff-Counterclaim Defendant Kinetech, Inc.'s Supplemental Responses to Defendant-Counterclaim Plaintiff Overpeer Inc.'s First Set of Interrogatories March 8, 2006, redacted, in C.D. Cal. case no. CV 04-7456 JFW (CTx) [24 pgs.]	
	11-7	Plaintiffs Altnet, Inc., Brilliant Digital, Inc., and Kinetech, Inc.'s Responses to Defendant Recording Industry Association of America's First Set of Requests for Admissions, Jan. 6, 2006, in C.D. Cal. case no. CV 04-7456 JFW (CTx) [26 pgs.]	

Examiner Signature		Date Considered	
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<p align="center">INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p align="center">Sheet 12 of 14</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	12-1	Plaintiffs' Claim Construction Opening Brief and Exhibits A-D, F, G; May 7, 2007, in C.D. Cal. case no. CV 06-5086 SJO (Ex) [112 pgs.]	
	12-2	Plaintiffs' Preliminary Claim Constructions and Extrinsic Evidence, Feb. 6, 2006, in case CV 06-5086 SJO (Ex) [20 pgs.]	
	12-3	Plaintiff's Reply to Defendant Mediasentry's Counterclaims in its Answer to the Second Amended Complaint, May 1, 2006, in C.D. Cal. Case no. CV 04-7456 JFW (CTx) [11 pgs.]	
	12-4	Plaintiff's Reply to Defendant RIAA's Counterclaims in its Answer to the Second Amended Complaint, May 1, 2006, in C.D. Cal. case no. CV 04-7456 JFW (CTx) [11 pgs.]	
	12-5	Plaintiffs' Reply To Defendants' Claim Construction Brief, filed April 23, 2007 in C.D. Cal. case no. CV 06-5086 ODW (Ex) [15 pgs.]	
	12-6	Reply to Examination Report, Jul. 19, 2007, in Application No. EP 96 910 762.2 - 1225 [7 pgs.]	
	12-7	RESPONSE TO NON-FINAL OFFICE ACTION filed May 19, 2009 in Application Serial No.: 11/017,650 [19 pgs.]	

Examiner Signature		Date Considered	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 13 of 14	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	13-1	RIVEST, R., RFC 1320, "The MD4 Message-Digest Algorithm," The Internet Engineering Task Force (IETF), April 1992.	
	13-2	SACKS-DAVIS, R., et al., "Multikey access methods based on superimposed coding techniques," ACM Trans. Database Syst. 12, 4 (Nov. 1987), 655-696.	
	13-3	SIEGEL, A., et al., "Deceit: a Flexible Distributed File System," Proc. Workshop on the Management of Replicated Data, Houston, TX, pp.15-17, 8-9 Nov 1990.	
	13-4	SIEGEL, A., et al., "Deceit: a Flexible Distributed File System," Technical Report, TR89-1042, Cornell University, Nov. 1989.	
	13-5	Stipulation and Proposed order to (1) Amend the Complaint, (2) Amend pretrial Schedule, and (3) Withdraw Motion to Stay, filed 09/08/2008 in C.D. Cal. Case No. CV 07-06161 VBF (PLAx) [6 pgs.]	
	13-6	Streamcast Networks Inc.'s Supplemental Responses to Certain of Plaintiffs' First Set of Interrogatories, Apr. 16, 2007, in C.D. Cal. case no. CV 06-5086 SJO (Ex) [61 pgs.]	
	13-7	StreamCast's Brief Re Claim Construction, Apr. 12, 2007, in C.D. Cal. case no. CV 06-5086 SJO (Ex) [11 pgs.]	

Examiner Signature		Date Considered	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 14 of 14	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

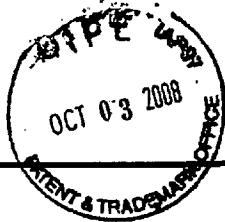
NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	14-1	Transcript of Deposition of David Farber, Feb. 16, 2006, in C.D. Cal. case no. CV 04-7456 JFW (CTX) [94 pgs.]	
	14-2	Transcript of Deposition of Robert B. K. Dewar, March 23, 2007, in C.D. Cal. case no. CV 06-5086 SJO (Ex) [61 pgs.]	
	14-3	Transcript of Deposition of Ronald Lachman, Feb. 1, 2006, C.D. Cal. case no. CV 04-7456 JFW (CTX) [96 pgs.]	
	14-4	USPTO, Non-Final Office Action mailed 05/06/209 in U.S. Appln. No. 11/980,679.	
	14-5	USPTO, Non-Final Office action mailed 06/15/2009 in U.S. Appln. No. 11/980,687.	
	14-6	USPTO, Non-Final Office action mailed 06/18/2009 in Reexam No. 90/010,260.	
	14-7		

Examiner Signature	/Khanh Pham/	Date Considered	06/22/2010
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 1 of 2	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No.	Document No.	Publication/ Issue Date	Name of Patentee or Applicant of Cited Document
	1-1	US-4658093	1987-04-14	Hellman
	1-2	US-5553143	1996-09-03	Ross et al.
	1-3			
	1-4			
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 2 of 2	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	2-1	CHERITON, David R. and Mann, Timothy P., "Decentralizing a global naming service for improved performance and fault tolerance", ACM Transactions on Computer Systems, Vol. 7, No. 2, May 1989, pages 147 - 183.	
	2-2	Request for Reexamination of U.S. Patent No. 6,928,442: Reexam Control Number 90/010,260, filed on August 29, 2008.	
	2-3		
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	2-5		
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Examiner Signature	/Khanh Pham/	Date Considered	06/22/2010
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<p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p>Sheet 1 of 4</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2166
	Examiner Name	PHAM, Khanh B.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No.	Document No.	Publication/ Issue Date	Name of Patentee or Applicant of Cited Document
	1-1	US-2005/0010792	2005/01	Carpentier et al.
	1-2	US-5491817	February 1996	Gopal et al.
	1-3	US-5581764	December 1996	Fitzgerald et al.
	1-4	US-5600834	February 1997	Howard
	1-5	US-5630067	1997/05	Kindell et al.
	1-6	US-5694596	December 1997	Campbell
	1-7	US-5701316	December 1997	Alferness et al.
	1-8	US-5710922	January 1998	Alley et al.
	1-9	US-5757915	May 1998	Aucsmith et al.
	1-10	US-5907619	May 1999	Davis
	1-11	US-5991414	November 1999	Garay et al.
	1-12	US-6135646	2000/10/24	Kahn et al.
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<p align="center">INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p align="center">Sheet 2 of 4</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2166
	Examiner Name	PHAM, Khanh B.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Document No.	Publication Date	Name of Patentee or Applicant of Cited Document	Notes
	2-1	GB 2294132 A	1996/04/17	Johnson	
	2-2	WO 97/43717	1997/11/20	Kahn	
	2-3				
	2-4				
	2-5				
	2-6				
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<p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p>Sheet 3 of 4</p>	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2166
	Examiner Name	PHAM, Khanh B.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	3-1	FOWLER, et al. "A User-Level Replicated File System," AT&T Bell Laboratories Technical Memorandum 0112670-930414-05, April 1993, and USENIX 1993 Summer Conference Proceedings, Cincinnati, OH, June 1993.	
	3-2	GREENE, D., et al., "Multi-Index Hashing for Information Retrieval", Nov. 20-22, 1994, Proceedings, 35th Annual Symp on Foundations of Computer Science, IEEE, pgs. 722 - 731.	
	3-3	HIRANO, et al, "Extendible hashing for concurrent insertions and retrievals," in Proc 4th Euromicro Workshop on Parallel and Distributed Processing, 1996 (PDP '96), Jan. 24, 1996 to Jan. 26, 1996, pgs. 235 - 242, Braga, Portugal.	
	3-4	PRENEEL et al., "The Cryptographic Hash Function RIPEMD-160", appeared in CryptoBytes RSA Laboratories, vol. 3, no. 2, pp. 9-14, Fall, 1997 (also Bosselaers et al., "The RIPEMD-160 Cryptographic Hash Function", Jan. 1997, Dr. Dobb's Journal, pp. 24-28)	
	3-5	PRUSKER et al., "The Siphon: Managing Distant Replicated Repositories" Nov. 8-9, 1990, Proc. Management of Replicated Data IEEE.	
	3-6	Reply to Examination Report, Munich, Nov. 18, 2009, in Application No. EP 96 910 762.2 [19 pgs.]	
	3-7	RICH, K. et al, "Hobgoblin: A File and Directory Auditor", Sep. 30-Oct. 3, 1991, Lisa V., San Diego, CA.	

Examiner Signature		Date Considered	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 4 of 4	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2166
	Examiner Name	PHAM, Khanh B.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	4-1	USPTO Final Office Action in U.S. Appln. No. 10/742,972, 12/22/2009.	
	4-2	USPTO, Advisory Action, 03/23/2010, in U.S. Appln. No. 11/980,679.	
	4-3	USPTO, Final Office Action in U.S. Reexam Control No. 90/010,260, January 29, 2010.	
	4-4	USPTO, Final Office Action mailed 01/12/2010 in U.S. Appln. No. 11/980,679.	
	4-5	USPTO, Final Office Action mailed 08/18/2009 in U.S. Appln. No. 11/017,650.	
	4-6	USPTO, Final Office Action mailed 09/30/2009 in U.S. Appln. No. 11/724,232.	
	4-7	USPTO, Final Office Action, 03/05/2010 in U.S. Appln. No. 11/980,687.	

Examiner Signature	/Samson Lemma/ /Khanh Pham/	Date Considered	07/17/2010 06/22/2010
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant. Notes: If identified, the following is provided: EA = English Abstract, T = Translation, PT = Partial Translation, SOR = Statement of Relevancy, PF = Patent Family

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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2002	(726/27).ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/07/17 20:21
L2	1015	(726/28).ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/07/17 20:21
L3	664	(726/29).ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/07/17 20:21
L4	692	(713/181).ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/07/17 20:22
L5	3457	(713/168).ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/07/17 20:22
L6	3	("6816872").pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/07/17 20:22

L7	2	("5530757").pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/07/17 20:22
L8	2	("5479654").pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/07/17 20:22
L9	2	("5454000").pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/07/17 20:23
L10	2	("5448668").pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/07/17 20:23
L11	2	("5694472").pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/07/17 20:23
L13	199	(713/188).ccls. and hash\$	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/07/17 20:25
L14	27	(707/695).ccls. and hash\$	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/07/17 20:26
L15	23	(714/54).ccls. and hash\$	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/07/17 20:26

L16	12	(714/21).ccls. and hash\$	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/07/17 20:26
L17	881	(713/189).ccls. and hash\$	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/07/17 20:27
L18	16	(713/189).ccls. and hash\$ with transmis\$	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/07/17 20:27
L19	18	(713/189).ccls. and hash\$ with transmitting	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/07/17 20:28
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L21	24	(1/1).ccls. and hash\$ adj transmit \$	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/07/17 20:28

7/ 17/ 2010 8:31:36 PM

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 ARLINGTON, VA 22203

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(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/980,687	10/31/2007	David A. Farber	2618-0017	6761

TITLE OF INVENTION: CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$1510	\$1510	10/22/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
LEMMA, SAMSON B	2432	726-028000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

Davidson Berquist
 1
 Jackson & Gowdey, LLP;
 2
 Brian Siritzky, Ph.D.
 3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE: Kinetech, Inc.
 Level 3 Communications, LLC

(B) RESIDENCE: (CITY AND STATE OR COUNTRY)
 Studio City, California
 Broomfield, Colorado

Please check the appropriate assignee category or categories (will not be printed on the patent): Individual Corporation or other private group entity Government

4a. The following fee(s) are submitted:

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- a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

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Authorized Signature /Brian Siritzky/ Date July 22, 2010
 Brian Siritzky
 Typed or printed name _____ Registration No. 37,497

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EFS ID:	8070875
Application Number:	11980687
International Application Number:	
Confirmation Number:	6761
Title of Invention:	CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM
First Named Inventor/Applicant Name:	David A. Farber
Customer Number:	75948
Filer:	Brian Siritzky
Filer Authorized By:	
Attorney Docket Number:	2618-0017
Receipt Date:	22-JUL-2010
Filing Date:	31-OCT-2007
Time Stamp:	15:38:07
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	PA_Fee_XMITTAL_07_22_2010.pdf	156019 <small>5218fbd1c376e4907db49ba9914fcb8f1348f91c</small>	no	1

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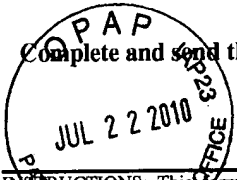
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07/23/2010 HVUONG2 00000092 501860 11980687

01 FC:1501 1510.00 DA

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/980,687	10/31/2007	David A. Farber	2618-0017	6761

TITLE OF INVENTION: CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM

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nonprovisional	NO	\$1510	\$0	\$1510	\$1510	10/22/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
LEMMA, SAMSON B	2432	726-028000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
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Davidson Berquist
 1 Jackson & Gowdey, LLP;
 2 Brian Siritzky, Ph.D.
 3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

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(A) NAME OF ASSIGNEE: Kinetech, Inc.
 Level 3 Communications, LLC

(B) RESIDENCE: (CITY and STATE OR COUNTRY)
 Studio City, California
 Broomfield, Colorado

Please check the appropriate assignee category or categories (will not be printed on the patent): Individual Corporation or other private group entity Government

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 Brian Siritzky
 Typed or printed name _____ Registration No. 37,497

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Notice of References Cited	Application/Control No. 11/980,688	Applicant(s)/Patent Under Reexamination FARBER ET AL.	
	Examiner Khanh B. Pham	Art Unit 2166	Page 1 of 1

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*	B	US-5,530,757	06-1996	Krawczyk, Hugo M.	713/188
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	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2166
	Examiner Name	PHAM, Khanh B.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

Sheet 1 of 1

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Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
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	1-5		
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Examiner Signature	/Khanh Pham/	Date Considered	06/22/2010
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
FORM PTO-1449 (modified)

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Application No.	11/980,688
Filing Date	October 31, 2007
First Named Inventor	David A. FARBER et al.
Group Art Unit	2166
Examiner Name	Unassigned
Attorney Docket No.	2618-0021
Confirmation No.	6768

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	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

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	Attorney Docket No.	2618-0021
	Confirmation No.	6768

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Examiner Initials*	Cite No.	Document No.	Publication/ Issue Date	Name of Patentee or Applicant of Cited Document
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 4 of 17	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

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¹Translation provided.

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	Attorney Docket No.	2618-0021
	Confirmation No.	6768

Sheet 5 of 17

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	Attorney Docket No.	2618-0021
	Confirmation No.	6768

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NON-PATENT REFERENCES			
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	6-1	Answer of Defendant RIAA to First Amended Complaint and Counterclaim, dated February 8, 2005, from Civil Action No. CV04-7456 JFW (CTX)	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768
Sheet 7 of 17		

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	T ¹
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	7-10	CWIS' Reply Markman Brief Construing the Terms at Issue in U.S. Patent No. 6,415,280, dated August 15, 2003, from Civil Action No. 02-11430 RWZ.	

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	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768
Sheet 8 of 17		

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	T ¹
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
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	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

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NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	T ¹
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 10 of 17	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
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NON-PATENT REFERENCES			
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 11 of 17	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 12 of 17	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 13 of 17	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
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Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	T ¹
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	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

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NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	T ¹
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	14-3	Plaintiff's Reply to Defendant Loudeye Corp.'s and Overpeer, Inc.'s Counterclaims, dated March 3, 2005, from Civil Action No. CV 04-7456 JFW (CTx)	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 15 of 17	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 16 of 17	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 17 of 17	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166
	Examiner Name	Unassigned
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
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Examiner Signature	/Khanh Pham/	Date Considered	06/22/2010
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 1 of 14	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No.	Document No.	Publication/ Issue Date	Name of Patentee or Applicant of Cited Document
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768
Sheet 2 of 14		

U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No.	Document No.	Publication/ Issue Date	Name of Patentee or Applicant of Cited Document
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	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

U.S. PATENT DOCUMENTS				
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Examiner Signature		Date Considered	
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ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /K.P./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

Sheet 4 of 14

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Document No.	Publication Date	Name of Patentee or Applicant of Cited Document	Notes
	4-1	EP 0 268 069 A2	May 25, 1988	IBM	
	4-2	EP 0 315 425	May 10, 1989	XEROX	
	4-3	EP 0 558 945 A2	Sep. 8, 1993	IBM	
	4-4	EP 0 566 967 A2	Oct. 27, 1993	IBM	
	4-5	EP 0 654 920 A2	May 24, 1995	Fischer	
	4-6	EP 0 658 022 A2	June 14, 1995	IBM	
	4-7	EP 0631 226 A1	Dec. 28, 1994	IBM	
	4-8	JP 06187384 A2	July 8, 1994	Texas Instruments Inc.	
	4-9	JP 06348558 A	Dec. 22, 1994	Toshiba Corp.	
	4-10	JP 2-127755	May 16, 1990	Digital Equip Corp.	
	4-11	JP 63-106048	May 11, 1988	NEC Corp.	
	4-12	JP 63-273961	Nov. 11, 1988	NEC Corp.	
	4-13	JP-59058564	1984/04/04	KOICHI, Iikura	
	4-14	WO 92/20021	Nov. 12, 1992	DEC	
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	4-16	WO 94/20913	Sept. 15, 1994	Bader	
	4-17	WO 95/01599	Jan. 12, 1995	Woodhill	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 5 of 14	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	5-1	[Proposed] Order Regarding Construction of Terms, filed Mar. 29, 2007 in C.D. Cal. case no. CV 06-5086 SJO (Ex) [9 pgs.]	
	5-2	Analysis of Plaintiffs' Claim Chart for the '280 Patent As Against Defendant Media Sentry, Inc. 11 pages	
	5-3	Analysis of Plaintiffs' Claim Chart for the '791 Patent As Against Defendant Media Sentry, Inc. (11916.001.0150.a) pp. 1-48	
	5-4	Analysis of Plaintiffs' Claim Chart for the '791 Patent As Against Defendant Overpeer pp. 1-40	
	5-5	BARBARA, D., et al., "Exploiting symmetries for low-cost comparison of file copies," 8th Int'l Conf. on Distributed Computing Systems, June 1988, pgs. 471-479, San Jose, CA.	
	5-6	CAMPBELL, M., "The Design of Text Signatures for Text Retrieval Systems," Tech. Report, Sept. 5, 1994, Deakin University, School of Computing & Math., Geelong, Australia.	
	5-7	CHANG, W. W. et al., "A signature access method for the Starburst database system," in Proc. 15th Int'l Conf. on Very Large Data Bases (Amsterdam, The Netherlands), pgs. 145-153.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 6 of 14	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	6-1	Changes to March 23, 2007 Deposition of Robert B. K. Dewar, in C.D. Cal. case no. CV 06-5086 SJO (Ex) [3 pgs + cover letter.]	
	6-2	Communication from EPO in European Application No. 96 910 762.2 - 1225 dated May 8, 2009 [4 pgs.]	
	6-3	Communication pursuant to Article 96(2) EPC from EPO (Examination Report), Jan. 17, 2007, in Application No. EP 96 910 762.2 -1225 [1 pg. with 5 pg. annex].	
	6-4	Complaint for Patent Infringement, Permanent Injunction and Damages, Aug. 8, 2006, in C.D. Cal. case no. CV 06-5086 SJO (Ex) [11 pgs.]	
	6-5	Complaint for Patent Infringement, Permanent Injunction and Damages, filed 09/21/2007 in C.D. Cal. Case No. CV 07-06161 VBF (PLAx) [10 pgs.]	
	6-6	Declaration of Charles S. Baker in Support of Defendant Lime Wire's Motion to Stay Pending Reexamination of Patent and Request for Extension of Deadlines, Aug. 29, 2008, in C.D. Cal. Case No. CV 07-06161 VBF (PLAx) [2 pgs.]	
	6-7	Defendant Lime Wire, LLC's First Amended Answer, Affirmative Defenses and Counterclaims, October 2, 2008, C.D. Cal. case No. 07-06161 VBF (PLAx) [13 pgs.]	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 7 of 14	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	7-1	Defendant Lime Wire, LLC's Second Amended Answer, Affirmative Defenses and Counterclaims, October 27, 2008, from C.D. Cal. case No. 07-06161 VBF (PLAx) [13 pgs.]	
	7-2	Defendant Michael Weiss's Answer to Plaintiff's Complaint for Patent Infringement, Permanent Injunction and Damages; Demand for Jury Trial, Sept. 15, 2006, case no. CV 06-5086 SJO (Ex) [10 pgs.]	
	7-3	Defendant Recording Industry Association of America's Amended Notice of Motion and Motion for Partial Summary Judgment on Plaintiffs' Claims for Patent Infringement and Inducing Patent Infringement; Memorandum of Points and Authorities, May 22, 2006, redacted, original confidential, filed under seal, in C.D. Cal. case no. CV 04-7456 JFW (CTx) [19 pgs.]	
	7-4	Defendant Recording Industry Association of America's and Mediasentry, Inc.'s Notice of Motion and Motion for Partial Summary Judgment Based on Implied License or, In the Alternative, Based on Patent Misuse and Unclean Hands, May 22, 2006, Redacted, in C.D. Cal. case no. CV 04-7456 JFW (CTx) [21 pgs.]	
	7-5	Defendant Recording Industry Association of America's and Mediasentry, Inc.'s Notice of Motion and Motion for Partial Summary Judgment Based on Implied License or, In the Alternative, Based on Patent Misuse and Unclean Hands, May 8, 2006, in C.D. Cal. case no. CV 04-7456 JFW (CTx) [20 pgs.]	
	7-6	Defendant StreamCast Networks Inc.'s Answer to Plaintiff's Complaint for Patent Infringement, Permanent Injunction and Damages; Demand for Jury Trial, Sept. 5, 2006, C.D. Cal. case no. CV 06-5086 SJO (Ex) [10 pgs.]	
	7-7	Defendants' Amended Preliminary Claim Constructions [Patent Rule 4-2], filed Feb. 7, 2007 in C.D. Cal. case no. CV 06-5086 SJO (Ex) [10 pgs.]	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 8 of 14	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	8-1	Defendant's Second Amended Preliminary Claim Constructions [Patent Rule 4-2], filed Feb. 9, 2007 in C.D. Cal. case no. CV 06-5086 SJO (Ex) [10 pgs.]	
	8-2	DEWAR, Rebuttal Expert Report of Robert B.K. Dewar, in C.D. Cal. case no. CV 04 -7456 JFW (CTx), April 10, 2006 [87 pgs].	
	8-3	FALOUTSOS, C. "Access methods for text," ACM Comput. Surv. 17, 1 (Mar. 1985), 49-74.	
	8-4	FALOUTSOS, C. et al., "Description and performance analysis of signature file methods for office filing," ACM Trans. Inf. Syst. 5, 3 (Jul. 1987), 237-257.	
	8-5	FALOUTSOS, C. et al., "Signature files: an access method for documents and its analytical performance evaluation," ACM Trans. Inf. Syst. 2, 4 (Oct. 1984), 267-288.	
	8-6	Federal Information Processing Standards (FIPS) Publication 180-1; Secure Hash Standard, April 17, 1995 [17 pgs.]	
	8-7	FEIGENBAUM, J. et al., "Cryptographic protection of databases and software," in Distributed Computing and Cryptography: Proc. DIMACS Workshop, April, 1991, pgs 161-172, American Mathematical Society, Boston, Mass.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 9 of 14	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	9-1	First Amended Answer of Defendant Mediasentry to Second Amended Complaint and Counterclaim, April 24, 2006, in C.D. Cal. case no. CV 04-7456 JFW (CTx) [29 pgs.]	
	9-2	First Amended Answer of Defendant RIAA to Second Amended Complaint and Counterclaim, April 24, 2006, in C.D. Cal. Case no. CV 04-7456 JFW (CTx) [27 pgs.]	
	9-3	First Amended Complaint for Patent Infringement, Permanent Injunction and Damages, filed 09/08/2008 in C.D. Cal. Case No. CV 07-06161 VBF (PLAx) [10 pgs.]	
	9-4	HARRISON, M. C., "Implementation of the substring test by hashing," Commun. ACM 14, 12 (Dec. 1971), 777-779.	
	9-5	IEEE, The Authoritative Dictionary of IEEE Standards Terms, 7th ed., Copyright 2000, pgs. 107, 176, 209, 240, 241, 432, 468, 505, 506, 682, 1016, 1113, 1266, and 1267.	
	9-6	ISHIKAWA, Y., et al., "Evaluation of signature files as set access facilities in OODBs," In Proc. of the 1993 ACM SIGMOD Inter. Conf. on Management of Data (Washington, D.C., U.S., May, 1993). P. Buneman & S. Jajodia, Eds. SIGMOD '93. ACM, NY, NY, 247-256.	
	9-7	Joint Claim Construction and Prehearing Statement, N.D. Cal. Rule 4-3, Feb. 12, 2007, in C.D. Cal. case no. CV 06-5086 SJO (Ex) [20 pgs.]	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 10 of 14	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	10-1	KARP, R. M. and Rabin, M. O., "Efficient randomized pattern-matching algorithms," IBM J. Res. Dev. 31, 2 (Mar. 1987), 249-260.	
	10-2	List of Asserted Claims and Infringement Chart for Each Asserted Claim, July 28, 2008, in C.D. Cal. Case No. CV 07-06161 VBF (PLAx) [31 pgs.]	
	10-3	MCGREGOR D. R. and MARIANI, J. A. "Fingerprinting - A technique for file identification and maintenance," SOFTWARE: PRACTICE AND EXPERIENCE, vol. 12, no. 12, December 1982 (1982-12), pages 1165-1166	
	10-4	Notice of Interested Parties, filed 09/21/2007 in C.D. Cal. Case No. CV 07-06161 VBF (PLAx) [2 pgs.]	
	10-5	Notice of Motion and Motion of Defendant Lime Wire to Stay Litigation Pending Reexamination of Patent and Request for Extension of Deadlines, Sept. 22, 2008, C.D. Cal. Case No. CV 07-06161 VBF (PLAx) [11 pgs.]	
	10-6	Notice of Related Cases, filed 09/21/2007 in C.D. Cal. Case No. CV 07-06161 VBF (PLAx) [2 pgs.]	
	10-7	PANAGOPOULOS, G., et al., "Bit-sliced signature files for very large text databases on a parallel machine architecture," In Proc. of the 4th Inter. Conf. on Extending Database Technology (EDBT), Cambridge, U.K., March 1994, pgs. 379 - 392 (Proc. LNCS 779 Springer 1994, ISBN 3-540-57818-8) [14 pgs.]	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 11 of 14	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	11-1	Patent Abstract, " Management System for Plural Versions," Pub. No. 63273961 A, published Nov. 11, 1988, NEC Corp.	
	11-2	Patent Abstracts of Japan, "Data Processor," Appln. No. 05135620, filed June 7, 1993, Toshiba Corp.	
	11-3	Plaintiff Kinetech, Inc.'s Responses to Defendant Mediasentry's First set of Interrogatories, May 1, 2006, in C.D. Cal. Case no. CV 04-7456 JFW (CTx) [14 pgs.]	
	11-4	Plaintiff-Counterclaim Defendant Altnet, Inc.'s Supplemental Responses to Defendant-Counterclaim Plaintiff Overpeer Inc.'s First Set of Interrogatories, March 8, 2006, redacted, in C.D. Cal. case no. CV 04-7456 JFW (CTx) [24 pgs.]	
	11-5	Plaintiff-Counterclaim Defendant Brilliant Digital Entertainment, Inc.'s Supplemental Responses to Defendant-Counterclaim Plaintiff Overpeer Inc.'s First Set of Interrogatories, March 8, 2006, redacted, in C.D. Cal. case no. CV 04-7456 JFW (CTx) [24 pgs.]	
	11-6	Plaintiff-Counterclaim Defendant Kinetech, Inc.'s Supplemental Responses to Defendant-Counterclaim Plaintiff Overpeer Inc.'s First Set of Interrogatories March 8, 2006, redacted, in C.D. Cal. case no. CV 04-7456 JFW (CTx) [24 pgs.]	
	11-7	Plaintiffs Altnet, Inc., Brilliant Digital, Inc., and Kinetech, Inc.'s Responses to Defendant Recording Industry Association of America's First Set of Requests for Admissions, Jan. 6, 2006, in C.D. Cal. case no. CV 04-7456 JFW (CTx) [26 pgs.]	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 12 of 14	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	12-1	Plaintiffs' Claim Construction Opening Brief and Exhibits A-D, F, G; May 7, 2007, in C.D. Cal. case no. CV 06-5086 SJO (Ex) [112 pgs.]	
	12-2	Plaintiffs' Preliminary Claim Constructions and Extrinsic Evidence, Feb. 6, 2006, in case CV 06-5086 SJO (Ex) [20 pgs.]	
	12-3	Plaintiff's Reply to Defendant Mediasentry's Counterclaims in its Answer to the Second Amended Complaint, May 1, 2006, in C.D. Cal. Case no. CV 04-7456 JFW (CTx) [11 pgs.]	
	12-4	Plaintiff's Reply to Defendant RIAA's Counterclaims in its Answer to the Second Amended Complaint, May 1, 2006, in C.D. Cal. case no. CV 04-7456 JFW (CTx) [11 pgs.]	
	12-5	Plaintiffs' Reply To Defendants' Claim Construction Brief, filed April 23, 2007 in C.D. Cal. case no. CV 06-5086 ODW (Ex) [15 pgs.]	
	12-6	Reply to Examination Report, Jul. 19, 2007, in Application No. EP 96 910 762.2 - 1225 [7 pgs.]	
	12-7	RESPONSE TO NON-FINAL OFFICE ACTION filed May 19, 2009 in Application Serial No.: 11/017,650 [19 pgs.]	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 13 of 14	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	13-1	RIVEST, R., RFC 1320, "The MD4 Message-Digest Algorithm," The Internet Engineering Task Force (IETF), April 1992.	
	13-2	SACKS-DAVIS, R., et al., "Multikey access methods based on superimposed coding techniques," ACM Trans. Database Syst. 12, 4 (Nov. 1987), 655-696.	
	13-3	SIEGEL, A., et al., "Deceit: a Flexible Distributed File System," Proc. Workshop on the Management of Replicated Data, Houston, TX, pp.15-17, 8-9 Nov 1990.	
	13-4	SIEGEL, A., et al., "Deceit: a Flexible Distributed File System," Technical Report, TR89-1042, Cornell University, Nov. 1989.	
	13-5	Stipulation and Proposed order to (1) Amend the Complaint, (2) Amend pretrial Schedule, and (3) Withdraw Motion to Stay, filed 09/08/2008 in C.D. Cal. Case No. CV 07-06161 VBF (PLAx) [6 pgs.]	
	13-6	Streamcast Networks Inc.'s Supplemental Responses to Certain of Plaintiffs' First Set of Interrogatories, Apr. 16, 2007, in C.D. Cal. case no. CV 06-5086 SJO (Ex) [61 pgs.]	
	13-7	StreamCast's Brief Re Claim Construction, Apr. 12, 2007, in C.D. Cal. case no. CV 06-5086 SJO (Ex) [11 pgs.]	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 14 of 14	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	14-1	Transcript of Deposition of David Farber, Feb. 16, 2006, in C.D. Cal. case no. CV 04-7456 JFW (CTX) [94 pgs.]	
	14-2	Transcript of Deposition of Robert B. K. Dewar, March 23, 2007, in C.D. Cal. case no. CV 06-5086 SJO (Ex) [61 pgs.]	
	14-3	Transcript of Deposition of Ronald Lachman, Feb. 1, 2006, C.D. Cal. case no. CV 04-7456 JFW (CTX) [96 pgs.]	
	14-4	USPTO, Non-Final Office Action mailed 05/06/209 in U.S. Appln. No. 11/980,679.	
	14-5	USPTO, Non-Final Office action mailed 06/15/2009 in U.S. Appln. No. 11/980,687.	
	14-6	USPTO, Non-Final Office action mailed 06/18/2009 in Reexam No. 90/010,260.	
	14-7		

Examiner Signature	/Khanh Pham/	Date Considered	06/22/2010
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
FORM PTO-1449 (modified)

Sheet 1 of 2

Application No.	11/980,688
Filing Date	October 31, 2007
First Named Inventor	David A. FARBER et al.
Group Art Unit	2165
Examiner Name	GAFFIN, Jeffrey A.
Attorney Docket No.	2618-0021
Confirmation No.	6768

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	Document No.	Publication/ Issue Date	Name of Patentee or Applicant of Cited Document
	1-1	US-4658093	1987-04-14	Hellman
	1-2	US-5553143	1996-09-03	Ross et al.
	1-3			
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 2 of 2	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2165
	Examiner Name	GAFFIN, Jeffrey A.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	2-1	CHERITON, David R. and Mann, Timothy P., "Decentralizing a global naming service for improved performance and fault tolerance", ACM Transactions on Computer Systems, Vol. 7, No. 2, May 1989, pages 147 - 183.	
	2-2	Request for Reexamination of U.S. Patent No. 6,928,442: Reexam Control Number 90/010,260, filed on August 29, 2008.	
	2-3		
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	2-6		
	2-7		

Examiner Signature	/Khanh Pham/	Date Considered	06/22/2010
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant. Notes: If identified, the following is provided: EA = English Abstract, T = Translation, PF = Patent Family.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /K.P./

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
FORM PTO-1449 (modified)

Sheet 1 of 4

Application No.	11/980,688
Filing Date	October 31, 2007
First Named Inventor	FARBER, David
Group Art Unit	2166
Examiner Name	PHAM, Khanh B.
Attorney Docket No.	2618-0021
Confirmation No.	6768

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	Document No.	Publication/ Issue Date	Name of Patentee or Applicant of Cited Document
	1-1	US-2005/0010792	2005/01	Carpentier et al.
	1-2	US-5491817	February 1996	Gopal et al.
	1-3	US-5581764	December 1996	Fitzgerald et al.
	1-4	US-5600834	February 1997	Howard
	1-5	US-5630067	1997/05	Kindell et al.
	1-6	US-5694596	December 1997	Campbell
	1-7	US-5701316	December 1997	Alferness et al.
	1-8	US-5710922	January 1998	Alley et al.
	1-9	US-5757915	May 1998	Aucsmith et al.
	1-10	US-5907619	May 1999	Davis
	1-11	US-5991414	November 1999	Garay et al.
	1-12	US-6135646	2000/10/24	Kahn et al.
	1-13			
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Examiner Signature		Date Considered	
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /K.P./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2166
	Examiner Name	PHAM, Khanh B.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

Sheet 2 of 4

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Document No.	Publication Date	Name of Patentee or Applicant of Cited Document	Notes
	2-1	GB 2294132 A	1996/04/17	Johnson	
	2-2	WO 97/43717	1997/11/20	Kahn	
	2-3				
	2-4				
	2-5				
	2-6				
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Examiner Signature		Date Considered	
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant. Notes: If identified, the following is provided: EA = English Abstract, T = Translation, PT = Partial Translation, SOR = Statement of Relevancy, PF = Patent Family.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /K.P./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 3 of 4	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2166
	Examiner Name	PHAM, Khanh B.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	3-1	FOWLER, et al. "A User-Level Replicated File System," AT&T Bell Laboratories Technical Memorandum 0112670-930414-05, April 1993, and USENIX 1993 Summer Conference Proceedings, Cincinnati, OH, June 1993.	
	3-2	GREENE, D., et al., "Multi-Index Hashing for Information Retrieval", Nov. 20-22, 1994, Proceedings, 35th Annual Symp on Foundations of Computer Science, IEEE, pgs. 722 - 731.	
	3-3	HIRANO, et al, "Extendible hashing for concurrent insertions and retrievals," in Proc 4th Euromicro Workshop on Parallel and Distributed Processing, 1996 (PDP '96), Jan. 24, 1996 to Jan. 26, 1996, pgs. 235 - 242, Braga, Portugal.	
	3-4	PRENEEL et al., "The Cryptographic Hash Function RIPEMD-160", appeared in CryptoBytes RSA Laboratories, vol. 3, no. 2, pp. 9-14, Fall, 1997 (also Bosselaers et al., "The RIPEMD-160 Cryptographic Hash Function", Jan. 1997, Dr. Dobb's Journal, pp. 24-28)	
	3-5	PRUSKER et al., "The Siphon: Managing Distant Replicated Repositories" Nov. 8-9, 1990, Proc. Management of Replicated Data IEEE.	
	3-6	Reply to Examination Report, Munich, Nov. 18, 2009, in Application No. EP 96 910 762.2 [19 pgs.]	
	3-7	RICH, K. et al, "Hobgoblin: A File and Directory Auditor", Sep. 30-Oct. 3, 1991, Lisa V., San Diego, CA.	

Examiner Signature		Date Considered	
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant. Notes: If identified, the following is provided: EA = English Abstract, T = Translation, PT = Partial Translation, SOR = Statement of Relevancy, PF = Patent Family.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /K.P./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 4 of 4	Application No.	11/980,688
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2166
	Examiner Name	PHAM, Khanh B.
	Attorney Docket No.	2618-0021
	Confirmation No.	6768

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	4-1	USPTO Final Office Action in U.S. Appln. No. 10/742,972, 12/22/2009.	
	4-2	USPTO, Advisory Action, 03/23/2010, in U.S. Appln. No. 11/980,679.	
	4-3	USPTO, Final Office Action in U.S. Reexam Control No. 90/010,260, January 29, 2010.	
	4-4	USPTO, Final Office Action mailed 01/12/2010 in U.S. Appln. No. 11/980,679.	
	4-5	USPTO, Final Office Action mailed 08/18/2009 in U.S. Appln. No. 11/017,650.	
	4-6	USPTO, Final Office Action mailed 09/30/2009 in U.S. Appln. No. 11/724,232.	
	4-7	USPTO, Final Office Action, 03/05/2010 in U.S. Appln. No. 11/980,687.	

Examiner Signature	/Khanh Pham/	Date Considered	06/22/2010
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant. Notes: If identified, the following is provided: EA = English Abstract, T = Translation, PT = Partial Translation, SOR = Statement of Relevancy, PF = Patent Family.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /K.P./

Electronic Acknowledgement Receipt

EFS ID:	7982254
Application Number:	11980687
International Application Number:	
Confirmation Number:	6761
Title of Invention:	CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM
First Named Inventor/Applicant Name:	David A. Farber
Customer Number:	75948
Filer:	Brian Siritzky
Filer Authorized By:	
Attorney Docket Number:	2618-0017
Receipt Date:	09-JUL-2010
Filing Date:	31-OCT-2007
Time Stamp:	11:08:05
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	NPL Documents	2618-0021_07-02-10_First_OA.pdf	8718088 <small>d71f31c05ce719811efaca9d167573d5af1df8ac</small>	no	57

Warnings:

Information:

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



DAVIDSON BERQUIST JACKSON & GOWDEY, LLP
ATTN: BRIAN SIRITZKY, PHD.
4300 WILSON BLVD., 7TH FLOOR
ARLINGTON, VA 22203

MAILED

JUL 07 2010

In re Application of : OFFICE OF PETITIONS
David A. Farber et al :
Application No. 11/980,687 : ON PETITION
Filed: October 31, 2007 :
Attorney Docket No. 2618-0017 :

This is a decision on the petition, filed July 6, 2010 under 37 CFR 1.313(c)(2) to withdraw the above-identified application from issue after payment of the issue fee.

The petition is **GRANTED**.

The above-identified application is withdrawn from issue for consideration of a submission under 37 CFR 1.114 (request for continued examination). See 37 CFR 1.313(c)(2).

Petitioner is advised that the issue fee paid on June 25, 2010 in the above-identified application cannot be refunded. If, however, the above-identified application is again allowed, petitioner may request that it be applied towards the issue fee required by the new Notice of Allowance.

Telephone inquiries should be directed to Irvin Dingle at (571) 272-3210.

This matter is being referred to Technology Center AU 2432 for processing of the request for continued examination under 37 CFR 1.114 and for consideration of the concurrently filed Information Disclosure Statement.

/Irvin Dingle/
Irvin Dingle
Petitions Examiner
Office of Petitions

¹ The request to apply the issue fee to the new Notice may be satisfied by completing and returning the new Issue Fee Transmittal Form PTOL-85(b), which includes the following language thereon: Commissioner for Patents is requested to apply the Issue Fee and Publication Fee (if any) or re-apply any previously paid issue fee to the application identified above. Petitioner is advised that, whether a fee is indicated as being due or not, the Issue Fee Transmittal Form **must** be completed and timely submitted to avoid abandonment. Note the language in bold text on the first page of the Notice of Allowance and Fee(s) Due (PTOL-85).

INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)	Application No.	11/980,687
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2432
	Examiner Name	LEMMA, SAMSON B.
	Attorney Docket No.	2618-0017
Confirmation No.	6761	
Sheet 1 of 2		

U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No.	Document No.	Publication/ Issue Date	Name of Patentee or Applicant of Cited Document
	1-1	US-5448668	09-1995	Perelson et al.
	1-2	US-5454000	09-1995	Dorfman, Barry L.
	1-3	US-5479654	12-1995	Squibb, Mark
	1-4	US-5530757	06-1996	Krawczyk, Hugo M.
	1-5	US-5694472	12-1997	Johnson et al.
	1-6	US-6816872	11-2004	Squibb, Mark
	1-7			
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	1-26			

Examiner Signature		Date Considered	
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

<p align="center">INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p align="center">Sheet 2 of 2</p>	Application No.	11/980,687
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2432
	Examiner Name	LEMMA, SAMSON B.
	Attorney Docket No.	2618-0017
	Confirmation No.	6761

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	2-1	USPTO, Non-Final Office Action mailed 07/02/2010 in U.S. Appln. No. 11/980,688 (Examiner Pham, Khanh B.)	
	2-2		
	2-3		
	2-4		
	2-5		
	2-6		
	2-7		

Examiner Signature		Date Considered	
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant. Notes: If identified, the following is provided: EA = English Abstract, T = Translation, PT = Partial Translation, SOR = Statement of Relevancy, PF = Patent Family.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF:

FARBER, David et al.

Application Serial No.: 11/980,687

Application Filing Date: October 31, 2007

Title: CONTROLLING ACCESS TO DATA IN A
DATA PROCESSING SYSTEM

Attorney Docket: 2618-0017

Group Art Unit: 2432

Examiner: LEMMA, Samson B.

Confirmation No.: 6761

PETITION TO WITHDRAW APPLICATION FROM ISSUE
UNDER 37 CFR 1.313(c)(2)

via EFS-Web

Hon. Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Please withdraw the above application from issuance under Rule 1.313(c)(2). Applicant has filed, contemporaneously with this petition a Request for Continued Examination (RCE) and an Information Disclosure Statement (IDS) for the purpose of allowing the Examiner to consider references cited in a related application. The Commissioner is authorized to charge our deposit account no. 501860 for the required fees.

CHARGE STATEMENT: Deposit Account No. 501860, order no. **2618-0017**.

The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any missing or insufficient fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (missing or insufficiencies only) now or hereafter relative to this application and the resulting Official Document under Rule 20, or credit any overpayment, to our Accounting/Order Nos. shown above.

This CHARGE STATEMENT does not authorize charge of the issue fee until/unless an issue fee transmittal sheet is filed.

Davidson Berquist Jackson & Gowdey LLP
4300 Wilson Blvd., 7th Floor,
Arlington Virginia 22203
Main: (703) 894-6400 • FAX: (703) 894-6430

Respectfully submitted,

/Brian Siritzky/Reg. No. 37,497

By: _____

Brian Siritzky, Ph.D.

Registration No.: 37,497

Date: July 6, 2010

Electronic Patent Application Fee Transmittal

Application Number:	11980687
Filing Date:	31-Oct-2007
Title of Invention:	CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM
First Named Inventor/Applicant Name:	David A. Farber
Filer:	Brian Siritzky
Attorney Docket Number:	2618-0017

Filed as Large Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Petition fee- 37 CFR 1.17(h) (Group III)	1464	1	130	130

Patent-Appeals-and-Interference:

Post-Allowance-and-Post-Issuance:

Extension-of-Time:

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Request for continued examination	1801	1	810	810
Total in USD (\$)				940

Electronic Acknowledgement Receipt

EFS ID:	7961107
Application Number:	11980687
International Application Number:	
Confirmation Number:	6761
Title of Invention:	CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM
First Named Inventor/Applicant Name:	David A. Farber
Customer Number:	75948
Filer:	Brian Siritzky
Filer Authorized By:	
Attorney Docket Number:	2618-0017
Receipt Date:	06-JUL-2010
Filing Date:	31-OCT-2007
Time Stamp:	17:56:00
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$940
RAM confirmation Number	4958
Deposit Account	501860
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	2618_0017_RCE_request_07_06_2010_sb0030e_fill.pdf	769797	no	3
			59e025196f0232044d4d66813f1208a73879bef7		
Warnings:					
Information:					
2	Transmittal Letter	PA_IDS_with_RCE_07_06_10.pdf	200252	no	3
			ca35c8d728afb3725cca9afc39d35eabc2439737		
Warnings:					
Information:					
3	Information Disclosure Statement (IDS) Filed (SB/08)	2618_0017_PA_1449_w_RCE_07_06_2010.pdf	261064	no	2
			16508ffecab518553fa47a147ee52a72c57e18f2		
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					
4	Petition to Withdraw from Issue	PA_2nd_Petition_to_Withdraw_from_Issue_07_06_10.pdf	180607	no	1
			3bc2c2256eb57023a7016ca779fb83859b20b53d		
Warnings:					
Information:					
5	Fee Worksheet (PTO-875)	fee-info.pdf	32434	no	2
			8b2d6aa0774947716e0fd7632b06edc55798caeb		
Warnings:					
Information:					
Total Files Size (in bytes):			1444154		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

**REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)**

Application Number	11/980,687	Filing Date	2007-10-31	Docket Number (if applicable)	2618-0017	Art Unit	2432
First Named Inventor	David A. FARBER			Examiner Name	Lemma, S. B.		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____

Other _____

Enclosed

Amendment/Reply

Information Disclosure Statement (IDS)

Affidavit(s)/ Declaration(s)

Other Form 1449

MISCELLANEOUS

Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____
(Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

Other This RCE is being filed with a Petition under 37 CFR 1.313(c)(2) to withdraw this application from issue.

FEES

The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 501860

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

Patent Practitioner Signature

Applicant Signature

Signature of Registered U.S. Patent Practitioner			
Signature	/Brian Siritzky/	Date (YYYY-MM-DD)	2010-07-06
Name	Brian Siritzky	Registration Number	37497

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. 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, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF:

FARBER, David et al.

Application Serial No.: 11/980,687

Application Filing Date: October 31, 2007

Title: CONTROLLING ACCESS TO DATA IN A
DATA PROCESSING SYSTEM

Attorney Docket: 2618-0017

Group Art Unit: 2432

Examiner: LEMMA, Samson B.

Confirmation No.: 6761

Date: July 6, 2010

INFORMATION DISCLOSURE STATEMENT

(Filed with RCE and Petition Under 37 CFR 1.313(c)(2))

via EFS-Web

Hon. Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. § 1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. One copy of each non-U.S. Patent reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

The submission of any document herewith, which is not a statutory bar, is not intended that any such document constitutes prior art against any of the claims of the present application or is considered to be material to patentability as defined in 37 C.F.R. § 1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference against the claims of the present application.

This Information Disclosure Statement is being filed with an RCE and a Petition Under 37 CFR 1.313(c)(2) to withdraw the application from issue. No certification or fee is required.

This IDS cites reference(s) cited in a related application (No. 11/980,677). The IDS also cites a non-final Office Action (dated July 2, 2010) from Application No. 11/980,688.

In that July 2, 2010 Office Action the Examiner (Pham) cited and relied on U.S. Patent No. 6,816,872 to Squibb. US 6,816,872 is listed on the form 1449 submitted herewith along with other references cited by the Examiner, specifically:

US-6,816,872	Squibb, Mark
US-5,530,757	Krawczyk, Hugo M.
US-5,479,654	Squibb, Mark
US-5,454,000	Dorfman, Barry L.
US-5,448,668	Perelson et al.
US-5,694,472	Johnson et al.

The Examiner in appln. no. 11/980,688 also relied on U.S. Patent No. 5,050,212 (to Dyson). U.S. Patent No. 5,050,212 is already of record in this application (Dyson was considered by the Examiner in the present application on May 23, 2009, and was also discussed by the Examiner in the present application in the Notice of Allowability mailed 06/24/2010).

In addition, the Examiner of appln. no. 11/980,688 issued a provisional obviousness-type double patenting rejection of that application with respect to claims 1-20 of the present application.

Although the related U.S. patent application is stored electronically at the PTO, as a courtesy to the Examiner, a copy of the Action is being provided herewith. If the Examiner requires any additional information regarding any of the documents cited herein, the Examiner is respectfully requested to contact the undersigned at the number provided.

This IDS is intended to be in full compliance with the rules, but should the Examiner find any part of its requirement content to have been omitted, prompt

In re Application of: FARBER, David et al.
Application S.N.: 11/980,687
IDS filed 07/06/2010 with RCE
Page 3 of 3

notice to that effect is earnestly solicited, along with additional time under Rule 97(f), to enable Applicant to comply fully.

CHARGE STATEMENT: Deposit Account No. 501860, order no. 2618-0017 .
The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any missing or insufficient fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (<u>missing or insufficiencies only</u>) now or hereafter relative to this application and the resulting Official Document under Rule 20, or credit any overpayment, to our Accounting/Order Nos. shown above.
This CHARGE STATEMENT <u>does not authorize</u> charge of the <u>issue fee</u> until/unless an issue fee transmittal sheet is filed.

CUSTOMER NUMBER 75948	Respectfully submitted, /Brian Siritzky/Reg. No. 37,497 By: _____ Brian Siritzky, Ph.D. Registration No.: 37,497 Date: July 6, 2010
Davidson Berquist Jackson & Gowdey LLP 4300 Wilson Blvd., 7th Floor, Arlington Virginia 22203 Main: (703) 894-6400 • FAX: (703) 894-6430	

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

75948 7590 06/24/2010

DAVIDSON BERQUIST JACKSON & GOWDEY, LLP
ATTN: BRIAN SIRITZKY, Ph.D.
4300 WILSON BLVD., 7TH FLOOR
ARLINGTON, VA 22203

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/980,687	10/31/2007	David A. Farber	2618-0017	6761

TITLE OF INVENTION: CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$1510	\$1510	09/24/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
LEMMA, SAMSON B	2432	726-028000

<p>1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</p> <p><input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</p> <p><input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.</p>	<p>2. For printing on the patent front page, list</p> <p>(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,</p> <p>(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.</p> <p>1 Davidson Berquist Jackson & Gowdey, LLP; 2 3 Brian Siritzky</p>
---	--

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE Kinetech, Inc. Level 3 Communications, LLC	(B) RESIDENCE: (CITY and STATE OR COUNTRY) Studio City, California Broomfield, Colorado
---	---

Please check the appropriate assignee category or categories (will not be printed on the patent): Individual Corporation or other private group entity Government

<p>4a. The following fee(s) are submitted:</p> <p><input type="checkbox"/> Issue Fee <input type="checkbox"/> Issue fee previously submitted.</p> <p><input type="checkbox"/> Publication Fee (No small entity discount permitted)</p> <p><input type="checkbox"/> Advance Order - # of Copies _____</p>	<p>4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)</p> <p><input type="checkbox"/> A check is enclosed.</p> <p><input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.</p> <p><input checked="" type="checkbox"/> The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number <u>501860</u> (enclose an extra copy of this form).</p>
--	---

5. Change in Entity Status (from status indicated above)

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature <u>/Brian Siritzky/</u>	Date <u>June 25, 2010</u>
Typed or printed name <u>Brian Siritzky</u>	Registration No. <u>37,497</u>

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. 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, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Electronic Acknowledgement Receipt

EFS ID:	7897136
Application Number:	11980687
International Application Number:	
Confirmation Number:	6761
Title of Invention:	CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM
First Named Inventor/Applicant Name:	David A. Farber
Customer Number:	75948
Filer:	Brian Siritzky
Filer Authorized By:	
Attorney Docket Number:	2618-0017
Receipt Date:	25-JUN-2010
Filing Date:	31-OCT-2007
Time Stamp:	16:35:14
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Post Allowance Communication - Incoming	2618_0017_PA_Comments_on_reasons_for_Allowance_06_25_2010.pdf	243847 <small>0d70d7c7845d644633eb66d55befa012aef95562</small>	no	2

Warnings:

Information:

2	Issue Fee Payment (PTO-85B)	PA_Issue_Fee_Xmit_06_25_2010.pdf	343325 2650f7f28320c8a0efd152887ea6316888f2c3cd	no	1
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Warnings:

Information:

Total Files Size (in bytes):	587172
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This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF: FARBER, David et al. Application Serial No.: 11/980,687 Application Filing Date: October 31, 2007 Title: CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM	Attorney Docket: 2618-0017 Group Art Unit: 2432 Examiner: LEMMA, S. B. Confirmation No.: 6761 Date: June 25, 2010
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COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE

via EFS-Web

Hon. Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant respectfully provides the following comments on the statement of reasons for allowance that was provided in the *Notice of Allowability* mailed on June 24, 2010.

While the Applicant agrees that the claims are patentable over the references listed and discussed by the Examiner, Applicant respectfully submits that the claims may be patentable over the references for different and/or additional reasons than those given by the Examiner in the Reasons for Allowance. In addition to the reasons for allowance provided by the Examiner, the Applicant submits that the claims are patentable over the cited references for all of the reasons, if any, provided in the Applicant's earlier responses and amendments.

Applicant assumes that the allowed claims are to be interpreted based on the limitations recited in the claims rather than any paraphrases or interpretations provided in the statement of reasons for allowance. Further, Applicant assumes that the statement of reasons for allowance is to be taken in light of the exact limitations recited in the allowed claims. The allowed claims should not be

In re Application of: FARBER, David et al.
Application S.N.: 11/980,687
Comments on Reasons For Allowance

interpreted to include the limitations that are not explicitly recited in the claims.
The paraphrases or stated purposes in the statement of reasons for allowance
should not be used in a way to narrow the scope of the allowed claims.

CHARGE STATEMENT: Deposit Account No. 501860, order no. 2618-0017.
The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any missing or insufficient fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (<u>missing or insufficiencies only</u>) now or hereafter relative to this application and the resulting Official Document under Rule 20, or credit any overpayment, to our Accounting/Order Nos. shown above.
This CHARGE STATEMENT <u>does not authorize</u> charge of the <u>issue fee</u> until/unless an issue fee transmittal sheet is filed.

CUSTOMER NUMBER 75948

Respectfully submitted,
/Brian Siritzky/Reg. No. 37,497

Davidson Berquist Jackson & Gowdey LLP
4300 Wilson Blvd., 7th Floor,
Arlington Virginia 22203
Main: (703) 894-6400 • FAX: (703) 894-6430

By: _____
Brian Siritzky, Ph.D.
Registration No.: 37,497



PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

75948 7590 06/24/2010

DAVIDSON BERQUIST JACKSON & GOWDEY, LLP
ATTN: BRIAN SIRITZKY, Ph.D.
4300 WILSON BLVD., 7TH FLOOR
ARLINGTON, VA 22203

06/28/2010 SSANDARI 00000005 501860 11980687

01 FC:1501 1510.00 DA

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

Form with fields for (Depositor's name), (Signature), and (Date)

Table with columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.

TITLE OF INVENTION: CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM

Table with columns: APPLN. TYPE, SMALL ENTITY, ISSUE FEE DUE, PUBLICATION FEE DUE, PREV. PAID ISSUE FEE, TOTAL FEE(S) DUE, DATE DUE

Table with columns: EXAMINER, ART UNIT, CLASS-SUBCLASS

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
"Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list
(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 Davidson Berquist
2 Jackson & Gowdey, LLP;
3 Brian Siritzky

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE
Kinotech, Inc.

(B) RESIDENCE: (CITY and STATE OR COUNTRY)
Studio City, California
Broomfield, Colorado

Level 3 Communications, LLC

Please check the appropriate assignee category or categories (will not be printed on the patent): Individual [] Corporation or other private group entity [x] Government []

4a. The following fee(s) are submitted:

Issue Fee Issue fee previously submitted.
Publication Fee (No small entity discount permitted)
Advance Order - # of Copies

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

A check is enclosed.
Payment by credit card. Form PTO-2038 is attached.
The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number 501860 (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature /Brian Siritzky/
Typed or printed name Brian Siritzky

Date June 25, 2010
Registration No. 37, 497

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. 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, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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Adjustment date: 06/28/2010 SSANDARI
05/13/2010 INTERSW 00007838 501860 11980687
PTOL-01 (FC:1501) Approved through 08/31/2010.



NOTICE OF ALLOWANCE AND FEE(S) DUE

75948 7590 06/24/2010

DAVIDSON BERQUIST JACKSON & GOWDEY, LLP
ATTN: BRIAN SIRITZKY, Ph.D.
4300 WILSON BLVD., 7TH FLOOR
ARLINGTON, VA 22203

EXAMINER
LEMMA, SAMSON B
ART UNIT PAPER NUMBER

2432
DATE MAILED: 06/24/2010

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.

11/980,687 10/31/2007 David A. Farber 2618-0017 6761

TITLE OF INVENTION: CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM

Table with 7 columns: APPLN. TYPE, SMALL ENTITY, ISSUE FEE DUE, PUBLICATION FEE DUE, PREV. PAID ISSUE FEE, TOTAL FEE(S) DUE, DATE DUE

nonprovisional NO \$1510 \$0 \$1510 \$1510 09/24/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P. O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
11/980,687 10/31/2007 David A. Farber 2618-0017 6761

75948 7590 06/24/2010

DAVIDSON BERQUIST JACKSON & GOWDEY, LLP
ATTN: BRIAN SIRITZKY, Ph.D.
4300 WILSON BLVD., 7TH FLOOR
ARLINGTON, VA 22203

Table with 2 columns: EXAMINER, ART UNIT, PAPER NUMBER
EXAMINER: LEMMA, SAMSON B
ART UNIT: 2432
PAPER NUMBER: DATE MAILED: 06/24/2010

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 79 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 79 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No. 11/980,687	Applicant(s) FARBER ET AL.	
Examiner Samson B. Lemma	Art Unit 2432	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. This communication is responsive to RCE filed on 06/11/2010.
- 2. The allowed claim(s) is/are 1-87.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____ .
 - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 - 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
- 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
- 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- 6. Interview Summary (PTO-413), Paper No./Mail Date _____ .
- 7. Examiner's Amendment/Comment
- 8. Examiner's Statement of Reasons for Allowance
- 9. Other _____.

/Samson B Lemma/
Examiner, Art Unit 2432

/Gilberto Barron Jr./
Supervisory Patent Examiner, Art Unit 2432

Art Unit: 2432

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/11/2010 has been entered.

Information Disclosure Statement

2. The information disclosure statements (IDS) submitted on 06/11/2010 has been considered. The submission is in compliance with the provisions of 37 CFR 1.97. Form PTO-1449 is signed and attached hereto.

Allowable Subject Matter

3. **Claims 1-87** are allowed
4. The following is an examiner's statement of reasons for allowance:
5. A close review of the prior arts submitted on 06/11/2010 with the IDS, revealed that, the limitations recited in the independent claims **1, 20, 21, 24, 66-71, 81 and 86** are still distinct from the prior art listed in the IDS,(Such as U.S. Patent No. 5678046)

Reference, US Patent 5678046 to Cahill et al, submitted with IDS, unlike the current application, is **focused on the** method and apparatus for storing and retrieving images of documents, e.g. checks. The method comprises placing a plurality of documents in a document imaging machine and forming an electronic image of each document, storing each electronic image in an electronic storage device, providing at least one user interface device in communication on a communication link with the electronic storage device, placing a request for at least one document image on the user interface device, transmitting the request by the communication link to the electronic storage device, searching the electronic storage device for the requested electronic image of the document, retrieving the at least one electronic image or providing an indication that the image was not found, storing the electronic image, if found, in an electronic file, for transmission to the user interface device at user option, providing the electronic image to the user interface device at command of a user at the user interface device for storage at the user interface device and displaying the requested electronic image on a display of the user interface device.

However, the above reference including the Dyson reference (US Patent No. 5050212) which is also cited on the office action submitted with IDS is distinct from the current application because the current application is focused on getting/transmitting a hash value of the content with the request from first computer at the first location to the second remote computer at the second location in the network; for the purpose of

Art Unit: 2432

accessing the stored content. In other words the current application is focused on (a) obtaining a list of content-dependent names, one for each of a plurality of data items, wherein, for each particular data item of the plurality of data items, the corresponding content-dependent name for that particular data item is based at least in part on a function of at least some of the contents of the particular data item, wherein the function comprises a message digest function or a hash function, and wherein two identical data items have the same content-dependent name on the list of content-dependent names;

(b) receiving at a first location, and from a second location distinct from said first location, a content-dependent identifier corresponding to a particular requested data item, said content-dependent identifier being based at least in part on at least some of the contents of the particular data item

c) at said first location, by a processor, by hardware in combination with software, determining, based at least in part on said content-dependent identifier for said particular data item, and using said list of content-dependent names, whether a requestor may access the particular requested data item; and

(d) based on said determining in (c), if it is determined that the requestor may not access the particular requested data item, causing access to the particular requested data item to be denied.

None of the prior art of record taken singularly or in combination teaches or suggests applicant's invention in particular a method of secure communication of digital data between a first device and a second device devices, said method

Art Unit: 2432

comprising the functional limitations recited in the respective independent claims **1, 20, 21, 24, 66-71, 81 and 86.**

For this reason, independent claims **1, 20, 21, 24, 66-71, 81 and 86** are still found to be novel and are allowed in view of the references submitted with IDS on 06/17/2010.

6. The dependent **claims** which are dependent on the above **independent claims** being further limiting to the independent claim, definite and enabled by the specification are also allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submission should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samson B Lemma whose telephone number is 571-272-3806. The examiner can normally be reached on Monday-Friday (8:00 am---4: 30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BARRON JR GILBERTO can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

/Samson B Lemma/
Examiner, Art Unit 2432

/Gilberto Barron Jr./
Supervisory Patent Examiner, Art Unit 2432

<i>Index of Claims</i> 	Application/Control No. 11980687	Applicant(s)/Patent Under Reexamination FARBER ET AL.
	Examiner Samson B Lemma	Art Unit 2432

✓	Rejected
=	Allowed


-	Cancelled
÷	Restricted

N	Non-Elected
I	Interference

A	Appeal
O	Objected

Claims renumbered in the same order as presented by applicant
 CPA
 T.D.
 R.1.47

CLAIM		DATE							
Final	Original	05/10/2009	02/20/2010	04/23/2010	06/17/2010				
	1	✓	✓	=	=				
	2	✓	✓	=	=				
	3	✓	✓	=	=				
	4	✓	✓	=	=				
	5	✓	✓	=	=				
	6	✓	✓	=	=				
	7	✓	✓	=	=				
	8	✓	✓	=	=				
	9	✓	✓	=	=				
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	35			=	=				
	36			=	=				

Index of Claims 	Application/Control No. 11980687	Applicant(s)/Patent Under Reexamination FARBER ET AL.
	Examiner Samson B Lemma	Art Unit 2432

✓	Rejected
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-	Cancelled
÷	Restricted

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I	Interference

A	Appeal
O	Objected

Claims renumbered in the same order as presented by applicant
 CPA
 T.D.
 R.1.47

CLAIM		DATE							
Final	Original	05/10/2009	02/20/2010	04/23/2010	06/17/2010				
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	72			=	=				

Index of Claims 	Application/Control No. 11980687	Applicant(s)/Patent Under Reexamination FARBER ET AL.
	Examiner Samson B Lemma	Art Unit 2432

✓	Rejected
=	Allowed


-	Cancelled
÷	Restricted

N	Non-Elected
I	Interference

A	Appeal
O	Objected

Claims renumbered in the same order as presented by applicant
 CPA
 T.D.
 R.1.47

CLAIM		DATE							
Final	Original	05/10/2009	02/20/2010	04/23/2010	06/17/2010				
	73			=	=				
	74			=	=				
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	82			=	=				
	83			=	=				
	84			=	=				
	85			=	=				
	86			=	=				
	87			=	=				

Search Notes 	Application/Control No. 11980687	Applicant(s)/Patent Under Reexamination FARBER ET AL.
	Examiner Samson B Lemma	Art Unit 2432

SEARCHED			
Class	Subclass	Date	Examiner
726	27,28, 29	06/17/2010	SL
713	181	06/17/2010	SL

SEARCH NOTES		
Search Notes	Date	Examiner
713/\$, 726/\$ (With text Search)	06/17/2010	SL
EAST (Search is Updated and Interference Search is done)	06/17/2010	SL
NPL (IEEE, ACM DIGITAL LIBRARY, GOOGLE, CITeseer)	06/17/2010	SL
Inventor's name Search, the following patents have been examined. (6928442, 6415280, 5978791, 6928442, 6415280 and 5978791) and TD is filed.	06/17/2010	SL

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner
Interference Search History Printout	Interference Search History Printout	06/17/2010	SL

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 1 of 2	Application No.	11/980,687
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2432
	Examiner Name	LEMMA, SAMSON B.
	Attorney Docket No.	2618-0017
	Confirmation No.	6761

U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No.	Document No.	Publication/ Issue Date	Name of Patentee or Applicant of Cited Document
/S.L./	1-1	US-5678046	1997/10/14	Cahill et al.
	1-2			
	1-3			
	1-4			
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	1-23			
	1-24			
	1-25			
	1-26			

Examiner Signature	/Samson Lemma/	Date Considered	06/17/2010
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 2 of 2	Application No.	11/980,687
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2432
	Examiner Name	LEMMA, SAMSON B.
	Attorney Docket No.	2618-0017
	Confirmation No.	6761

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
/S.L./	2-1	USPTO, Non-Final Office Action in U.S. Appln. No. 11/980,677, June 4, 2010 (Examiner Pham, Khanh B.).	
	2-2		
	2-3		
	2-4		
	2-5		
	2-6		
	2-7		

Examiner Signature	/Samson Lemma/	Date Considered	06/17/2010
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant. Notes: If identified, the following is provided: EA = English Abstract, T = Translation, PT = Partial Translation, SOR = Statement of Relevancy, PF = Patent Family.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1966	(726/27).ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/06/17 20:46
L2	986	(726/28).ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/06/17 20:46
L3	652	(726/29).ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/06/17 20:46
L4	678	(713/181).ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/06/17 20:46
L5	3392	(713/168).ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/06/17 20:46
L6	1	("5678046").pn. and hash\$	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/06/17 20:49

6/ 17/ 2010 8:51:09 PM

**REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)**

Application Number	11/980,687	Filing Date	2007-10-31	Docket Number (if applicable)	2618-0017	Art Unit	2432
First Named Inventor	David A. FARBER			Examiner Name	Lemma, S. B.		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____

Other _____

Enclosed

Amendment/Reply

Information Disclosure Statement (IDS)

Affidavit(s)/ Declaration(s)

Other
Form 1449

MISCELLANEOUS

Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____
(Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

Other
This RCE is being filed with a Petition under 37 CFR 1.313(c)(2) to withdraw this application from issue.

FEES

The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 501860

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

Patent Practitioner Signature

Applicant Signature

Signature of Registered U.S. Patent Practitioner			
Signature	/Brian Siritzky/	Date (YYYY-MM-DD)	2010-06-11
Name	Brian Siritzky	Registration Number	37497

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. 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, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal

Application Number:	11980687
Filing Date:	31-Oct-2007
Title of Invention:	CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM
First Named Inventor/Applicant Name:	David A. Farber
Filer:	Brian Siritzky
Attorney Docket Number:	2618-0017

Filed as Large Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Petition fee- 37 CFR 1.17(h) (Group III)	1464	1	130	130

Patent-Appeals-and-Interference:

Post-Allowance-and-Post-Issuance:

Extension-of-Time:

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Request for continued examination	1801	1	810	810
Total in USD (\$)				940

Electronic Acknowledgement Receipt

EFS ID:	7795480
Application Number:	11980687
International Application Number:	
Confirmation Number:	6761
Title of Invention:	CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM
First Named Inventor/Applicant Name:	David A. Farber
Customer Number:	75948
Filer:	Brian Siritzky
Filer Authorized By:	
Attorney Docket Number:	2618-0017
Receipt Date:	11-JUN-2010
Filing Date:	31-OCT-2007
Time Stamp:	12:53:48
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$940
RAM confirmation Number	9209
Deposit Account	501860
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Filed (SB/08)	2618_0017_PA_1449_w_RCE_06_11_2010.pdf	91463 b41a49361aced30b0c36dbf0c56214cce1403cf3	no	2
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					
2	Transmittal Letter	PA_IDS_with_RCE_06_11_10.pdf	216610 a9bedc68604b91b2d74cb383bad368c98172069a	no	3
Warnings:					
Information:					
3	Petition to Withdraw from Issue	PA_Petition_to_Withdraw_from_Issue_06_11_10.pdf	187949 aa312846cd8a33a841662a899c941403e2e40dfa	no	1
Warnings:					
Information:					
4	Request for Continued Examination (RCE)	2618_0017_RCE_request_06_11_2010_sb0030e_fill.pdf	769875 4300083e5d0b5339b9924f91a5d4b373f8e72927	no	3
Warnings:					
Information:					
5	NPL Documents	11980677_OA_06_04_2010_from_PAIR.pdf	2500377 deeeae5a9d069ae893a9d6980e6c3d2f605c77d82	no	21
Warnings:					
Information:					
6	Fee Worksheet (PTO-875)	fee-info.pdf	32434 1c928aa2341cabe0563493bcd84e3c0a403729ed	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			3798708		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

<p align="center">INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p align="center">Sheet 1 of 2</p>	Application No.	11/980,687
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2432
	Examiner Name	LEMMA, SAMSON B.
	Attorney Docket No.	2618-0017
	Confirmation No.	6761

U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No.	Document No.	Publication/ Issue Date	Name of Patentee or Applicant of Cited Document
	1-1	US-5678046	1997/10/14	Cahill et al.
	1-2			
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	1-25			
	1-26			

Examiner Signature		Date Considered	
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

<p align="center">INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)</p> <p align="center">Sheet 2 of 2</p>	Application No.	11/980,687
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2432
	Examiner Name	LEMMA, SAMSON B.
	Attorney Docket No.	2618-0017
	Confirmation No.	6761

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	2-1	USPTO, Non-Final Office Action in U.S. Appln. No. 11/980,677, June 4, 2010 (Examiner Pham, Khanh B.).	
	2-2		
	2-3		
	2-4		
	2-5		
	2-6		
	2-7		

Examiner Signature		Date Considered	
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant. Notes: If identified, the following is provided: EA = English Abstract, T = Translation, PT = Partial Translation, SOR = Statement of Relevancy, PF = Patent Family.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF:

FARBER, David et al.

Application Serial No.: 11/980,687

Application Filing Date: October 31, 2007

Title: CONTROLLING ACCESS TO DATA IN A
DATA PROCESSING SYSTEM

Attorney Docket: 2618-0017

Group Art Unit: 2432

Examiner: LEMMA, Samson B.

Confirmation No.: 6761

INFORMATION DISCLOSURE STATEMENT

(Filed with RCE and Petition Under 37 CFR 1.313(c)(2))

via EFS-Web

Hon. Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. § 1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. One copy of each non-U.S. Patent reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

The submission of any document herewith, which is not a statutory bar, is not intended that any such document constitutes prior art against any of the claims of the present application or is considered to be material to patentability as defined in 37 C.F.R. § 1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference against the claims of the present application.

This Information Disclosure Statement is being filed with an RCE and a Petition Under 37 CFR 1.313(c)(2) to withdraw the application from issue. No certification or fee is required.

In re Application of: FARBER, David et al.
Application S.N.: 11/980,687
IDS filed 06/11/10
Page 2 of 3

This IDS cites reference(s) cited in a related application (No. 11/980,677). The IDS also cites a non-final Office Action (dated June 4, 2010) from Application No. 11/980,677.

In that June 4, 2010 Office Action the Examiner cited and relied on U.S. Patent No. 5,678,046 to Cahill *et al.* US 5,678,046 is listed on the form 1449 submitted herewith. The Examiner also relied on US 5,050,212 (to Dyson) and cited US 5,343,527 (to Moore). Both US 5,050,212 and US 5,343,527 are already of record in this application (both Dyson and Moore were considered by the Examiner on May 23, 2009).

Although the related U.S. patent application is stored electronically at the PTO, a copy of the Action is being provided herewith. If the Examiner requires any additional information regarding any of the documents cited herein, the Examiner is respectfully requested to contact the undersigned at the number provided.

This IDS is intended to be in full compliance with the rules, but should the Examiner find any part of its requirement content to have been omitted, prompt notice to that effect is earnestly solicited, along with additional time under Rule 97(f), to enable Applicant to comply fully.

In re Application of: FARBER, David et al.
Application S.N.: 11/980,687
IDS filed 06/11/10
Page 3 of 3

CHARGE STATEMENT: Deposit Account No. 501860, order no. 2618-0017 .
The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any missing or insufficient fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (<u>missing or insufficiencies only</u>) now or hereafter relative to this application and the resulting Official Document under Rule 20, or credit any overpayment, to our Accounting/Order Nos. shown above.
This CHARGE STATEMENT <u>does not authorize</u> charge of the <u>issue fee</u> until/unless an issue fee transmittal sheet is filed.

CUSTOMER NUMBER 75948	Respectfully submitted, /Brian Siritzky/Reg. No. 37,497 By: _____ Brian Siritzky, Ph.D. Registration No.: 37,497 Date: June 11, 2010
-------------------------------------	--

Davidson Berquist Jackson & Gowdey LLP
4300 Wilson Blvd., 7th Floor,
Arlington Virginia 22203
Main: (703) 894-6400 • FAX: (703) 894-6430

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF:

FARBER, David et al.

Application Serial No.: 11/980,687

Application Filing Date: October 31, 2007

Title: CONTROLLING ACCESS TO DATA IN A
DATA PROCESSING SYSTEM

Attorney Docket: 2618-0017

Group Art Unit: 2432

Examiner: LEMMA, Samson B.

Confirmation No.: 6761

PETITION TO WITHDRAW APPLICATION FROM ISSUE
UNDER 37 CFR 1.313(c)(2)

via EFS-Web

Hon. Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Please withdraw the above application from issuance under Rule 1.313(c)(2). Applicant has filed, contemporaneously with this petition a Request for Continued Examination (RCE) and an Information Disclosure Statement (IDS) for the purpose of allowing the Examiner to consider references cited in a related application. The Commissioner is authorized to charge our deposit account no. 501860 for the required fees.

CHARGE STATEMENT: Deposit Account No. 501860, order no. **2618-0017**.

The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any missing or insufficient fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (missing or insufficiencies only) now or hereafter relative to this application and the resulting Official Document under Rule 20, or credit any overpayment, to our Accounting/Order Nos. shown above.

This CHARGE STATEMENT does not authorize charge of the issue fee until/unless an issue fee transmittal sheet is filed.

Davidson Berquist Jackson & Gowdey LLP
4300 Wilson Blvd., 7th Floor,
Arlington Virginia 22203
Main: (703) 894-6400 • FAX: (703) 894-6430

Respectfully submitted,

/Brian Siritzky/Reg. No. 37,497

By: _____

Brian Siritzky, Ph.D.

Registration No.: 37,497

Date: June 11, 2010



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

DAVIDSON BERQUIST JACKSON & GOWDEY, LLP
ATTN: BRIAN SIRITZKY, Ph.D.
4300 WILSON BLVD., 7TH FLOOR
ARLINGTON VA 22203

MAILED
JUN 11 2010
OFFICE OF PETITIONS

In re Application of :
David A. Farber, et al. :
Application No.: 11/980,687 : **ON PETITION**
Filed: October 31, 2007 :
Attorney Docket No.: 2618-0017 :

This is a decision on the petition, filed June 11, 2010, under 37 CFR 1.313(c)(2) to withdraw the above-identified application from issue after payment of the issue fee.

The petition is **GRANTED**.

The above-identified application is withdrawn from issue for consideration of a submission under 37 CFR 1.114 (request for continued examination). See 37 CFR 1.313(c)(2).

Petitioner is advised that the issue fee paid on May 12, 2010, cannot be refunded. If, however, this application is again allowed, petitioner may request that it be applied towards the issue fee required by the new Notice of Allowance.¹


Telephone inquiries relating to this decision should be directed to the undersigned at (571) 272-3204.

The application is being referred to Technology Center AU 2432 for further processing of the request for continued examination under 37 CFR 1.114 and for consideration of the concurrently filed Information Disclosure Statement (IDS).

/SDB/

Sherry D. Brinkley
Petitions Examiner
Office of Petitions

¹ The request to apply the issue fee to the new Notice may be satisfied by completing and returning the new Part B – Fee(s) Transmittal Form (along with any balance due at the time of submission). Petitioner is advised that the Issue Fee Transmittal Form must be completed and timely submitted to avoid abandonment of the application.

Application Number 	Application/Control No. 11/980,687	Applicant(s)/Patent under Reexamination FARBER ET AL.

Document Code - DISQ	Internal Document – DO NOT MAIL
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TERMINAL DISCLAIMER	<input checked="" type="checkbox"/> APPROVED	<input type="checkbox"/> DISAPPROVED
Date Filed : 05/12/10	This patent is subject to a Terminal Disclaimer	

Approved/Disapproved by:
Angie Walker



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
11/980,687 10/31/2007 David A. Farber 2618-0017 6761

75948 7590 05/27/2010
DAVIDSON BERQUIST JACKSON & GOWDEY, LLP
ATTN: BRIAN SIRTZKY, Ph.D.
4300 WILSON BLVD., 7TH FLOOR
ARLINGTON, VA 22203

EXAMINER

LEMMA, SAMSON B

Table with 2 columns: ART UNIT, PAPER NUMBER

2432

Table with 2 columns: MAIL DATE, DELIVERY MODE

05/27/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Supplemental
Notice of Allowability**

Application No. 11/980,687	Applicant(s) FARBER ET AL.	
Examiner Samson B. Lemma	Art Unit 2432	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to TD filed on 5/12/10.
2. The allowed claim(s) is/are 1-87.
3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

/Gilberto Barron Jr./
Supervisory Patent Examiner, Art Unit 2432

Art Unit: 2432

Examiner Comment

1. Claims 1-87 have been allowed.
2. On 05/04/2010, applicant's representative filed a Terminal Disclaimer to overcome the potentially nonstatutory obvious type of double patenting rejection. However the Terminal Disclaimer filed on 05/04/2010 was disapproved.
3. Consequently a new Terminal Disclaimer was filed on 05/12/2010. This Terminal Disclaimer has been approved
4. A Terminal Disclaimer was required to overcome a potential nonstatutory obviousness type double patent rejection with respect to US Patent 6,928,442. Although the conflicting claims are not identical, they are not patentably distinct from each other because all elements of claims 1 -56 of the 442' patent correspond to elements of the instant claims 1-87.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samson B Lemma whose telephone number is 571-272-3806. The examiner can normally be reached on Monday-Friday (8:00 am---4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BARRON JR GILBERTO can be reached on 571-272-3799.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

/Samson B Lemma/
Examiner, Art Unit 2432

/Gilberto Barron Jr./
Supervisory Patent Examiner, Art Unit 2432

INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)	Application No.	11/980,687
	Filing Date	October 31, 2007
	First Named Inventor	David A. FARBER et al.
	Group Art Unit	2166 2432
	Examiner Name	Unassigned Samson Lemma
	Attorney Docket No.	2618-0017
Confirmation No.	6761	

Sheet 1 of 17

U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No.	Document No.	Publication/ Issue Date	Name of Patentee or Applicant of Cited Document
/S.L./	1-1	US-2004-0139097	July 2004	Farber et al.
	1-2	US-2005-0114296-A1	May 2005	Farber et al.
	1-3	US-3668647	June 1972	Evangelisti et al.
	1-4	US-4215402	July 1980	Mitchell et al.
	1-5	US-4290105	September 1981	Cichelli et al.
	1-6	US-4376299	March 1983	Rivest
	1-7	US-4405829	September 1983	Rivest et al.
	1-8	US-4412285	October 1983	Neches et al.
	1-9	US-4414624	November 1983	Summer, Jr. et al.
	1-10	US-4441155	April 1984	Fletcher et al.
	1-11	US-4464713	August 1984	Benhase et al.
	1-12	US-4490782	December 1984	Dixon et al.
	1-13	US-4571700	February 1986	Emry, Jr. et al.
	1-14	US-4577293	March 1986	Matick et al.
	1-15	US-4642793	February 1987	Meaden
	1-16	US-4675810	June 1987	Gruner et al.
	1-17	US-4691299	September 1987	Rivest et al.
	1-18	US-4725945	February 1988	Kronstadt et al.
	1-19	US-4773039	September 1988	Zamora
	1-20	US-4887235	December 1989	Holloway et al.
	1-21	US-4888681	December 1989	Barnes et al.
	1-22	US-4922414	May 1990	Holloway et al.
	1-23	US-4922417	May 1990	Churm et al.
	1-24	US-4972367	November 1990	Burke
	1-25	US-5007658 <i>12</i>	April 1991	Bendert et al. <i>5077658</i>
/S.L./	1-26	US-5025421	June 1991	Cho

S.L.
5/24/10

Examiner Signature	/Samson Lemma/	Date Considered	02/27/2010
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.L./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 1 of 14	Application No.	11/980,687
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2432
	Examiner Name	LEMMA, SAMSON B.
	Attorney Docket No.	2618-0017
	Confirmation No.	6761

U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No.	Document No.	Publication/ Issue Date	Name of Patentee or Applicant of Cited Document
	1-1	US-2002/0082999	27-Jun-02	Lee, Cheol-Woong ; et al.
	1-2	US-2002-0052884	2001/11/15	Farber et al. <i>5/2/2002</i>
	1-3	US-2003/0078888	24-Apr-03	Lee, Cheol-Woong ; et al.
	1-4	US-2003/0078889	24-Apr-03	Lee, Cheol-Woong ; et al.
	1-5	US-2003/0095660	22-May-03	Lee, Chang Young ; et al.
	1-6	US-2007-0185848	2007/03/15	Farber et al. <i>8/9/2007</i>
	1-7	US-2008-0065635	2007/10/31	Farber et al. <i>3/13/2008</i>
	1-8	US-2008-0066191	2007/10/31	Farber et al. <i>3/13/2008</i>
	1-9	US-2008-0071855	2007/10/31	Farber et al. <i>3/20/2008</i>
	1-10	US-2008-0082551	2007/10/31	Farber et al. <i>4/3/2008</i>
	1-11	US-3835260	Sept. 10, 1974	Prescher, et al.
	1-12	US-4096568	Jun. 20, 1978	Bennett et al.
	1-13	US-4221003	Sep. 2, 1980	Chang et al.
	1-14	US-4558413	Dec. 10, 1985	Schmidt et al.
	1-15	US-4821184	Apr. 11, 1989	Clancy et al.
	1-16	US-4914586	April 3, 1990	Swinehart, et al.
	1-17	US-4949302	1990/08	Arnold, et al.
	1-18	US-5014192	May-07-91	Mansfield et al.
	1-19	US-5047918	Sep. 10, 1991	Schwartz et al.
	1-20	US-5084815	1992/01	Mazzario, Andrea M.
	1-21	US-5117351	May 6, 1992	Miller
	1-22	US-5182799	Jan. 26, 1993	Tamura et al.
	1-23	US-5199073	Mar. 30, 1993	Scott
	1-24	US-5204897	Apr. 20, 1993	Wyman
	1-25	US-5204958	Apr. 20, 1993	Cheng et al.
	1-26	US-5204966	Apr. 20, 1993	Wittenberg et al.

Examiner Signature	/Samson Lemma/	Date Considered	02/27/2010
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.L./

*S.L.
5/24/10*

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF: FARBER, David et al. Application Serial No.: 11/980,687 Application Filing Date: October 31, 2007 Title: CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM	Attorney Docket: 2618-0017 Group Art Unit: 2432 Examiner: LEMMA, S. B. Confirmation No.: 6761 Date: May 12, 2010
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LETTER RE TERMINAL DISCLAIMER

via EFS-Web

Hon. Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant filed the Terminal Disclaimer in this application on April 22, 2010 with respect to U.S. Patent No. 6,928,442.

The Terminal Disclaimer was originally accepted but (as of 05/04/2010), a document with document code (DISQ) on the PAIR system indicates that the Terminal Disclaimer has been disapproved because “the td only show 50% interest it should be a 100%.”

The Terminal Disclaimer was made by “The Owner, Kinetech, Inc., of 50% percent interest” in the present application and in U.S. Patent No. 6,928,442.

As explained in the MPEP, in the section titled REQUIREMENTS OF A TERMINAL DISCLAIMER, “[a] terminal disclaimer is a statement filed by an owner (in whole *or in part*) of a patent or a patent to be granted” *MPEP 804.02* § V., with emphasis added.

The requirements for a terminal disclaimer are set forth in 37 CFR 1.321. *Id.* A terminal disclaimer filed in accordance with 37 CFR 1.321(c) need not be signed by an entity claiming a 100% interest in the patent or the application. To the contrary, Rule 1.321 specifically contemplates a terminal disclaimer by an assignee of record *of an undivided part interest* (see 37 CFR § 1.321(c)(1), and

In re Application of: FARBER, David et al.
Application S.N.: 11/980,687
Letter re Terminal Disclaimer

§ 1.321 (b)(1)(ii)). In any case, 37 CFR § 1.321 specifically states that “*An applicant or assignee* may disclaim or dedicate to the public ... any terminal part of the term, of a patent to be granted.” The rule does not require that the disclaimer be by an applicant or assignee claiming the entire interest in the patent.

In this case the undersigned, representing the Kinetech, Inc., the owner of a fifty percent undivided interest in the present application and in U.S. Patent No. 6,928,442, signed the Terminal Disclaimer in accordance with 37 CFR § 1.321(c)(1), and § 1.321(b)(1)(iv).

Applicant respectfully submits that the terminal disclaimer was proper and should be approved.

CUSTOMER NUMBER 75948

Davidson Berquist Jackson & Gowdey LLP
4300 Wilson Blvd., 7th Floor,
Arlington Virginia 22203
Main: (703) 894-6400 • FAX: (703) 894-6430

Respectfully submitted,

/Brian Siritzky/Reg. No. 37,497

By: _____
Brian Siritzky, Ph.D.
Registration No.: 37,497

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF:

FARBER, David et al.

Application Serial No.: 11/980,687

Application Filing Date: October 31, 2007

Title: **CONTROLLING ACCESS TO DATA IN A
DATA PROCESSING SYSTEM**

Attorney Docket: 2618-0017

Group Art Unit: 2432

Examiner: LEMMA, S. B.

Confirmation No.: 6761

Date: May 12, 2010

TRANSMITTAL OF SUPPLEMENTAL DECLARATION

via EFS-Web

Hon. Commissioner of Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

Applicant respectfully submits herewith a supplemental declaration.

CUSTOMER NUMBER

75948

Davidson Berquist Jackson & Gowdey LLP
4300 Wilson Blvd., 7th Floor,
Arlington Virginia 22203
Main: (703) 894-6400 • FAX: (703) 894-6430

Respectfully submitted,

/Brian Siritzky/Reg. No. 37,497

By: _____

Brian Siritzky, Ph.D.

Registration No.: 37,497

SUPPLEMENTAL DECLARATION FOR UTILITY PATENT APPLICATION (37 CFR 1.67)

Attorney Docket Number	2618-0017
First Named Inventor	David A. FARBER
Application Number	11/980,687
Filing Date	10-31-2007
Group Art Unit	2432
Examiner Name	Samson LEMMA

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM

the specification of which was filed on October 31, 2007 as United States Application Number 11/980,687 and was amended on April 22, 2010.

I hereby declare that the subject matter of the amendment filed on April 22, 2010 and the claims as allowed on April 30, 2010 was (were) part of my or our invention and was (were) invented before the filing date of the original application, above identified for such invention.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims as amended specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY) Country	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I hereby claim the benefit under 35 U.S.C. 119(e)/120/365 of all prior United States applications listed below.

Prior U.S./PCT Application(s) -- Application Serial No.	Day/Month/Year Filed	Status: Patented, Pending, Abandoned
11/724,232	03-15-2007	pending
11/017,650	12-22-2004	pending
10/742,972	12-23-2003	pending
09/987,723	11-15-2001	patented

SUPPLEMENTAL DECLARATION — Utility Patent Application
Application No. 11/980,687

Prior U.S./PCT Application(s) -- Application Serial No.	Day/Month/Year Filed	Status: Patented, Pending, Abandoned
09/283,160	04-01-1999	patented
08/960,079	10-24-1997	patented
08/425,160	04-11-1995	abandoned

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 wilful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such wilful false statements may jeopardize the validity of the application or any patent issued thereon.

NAME OF FIRST INVENTOR:				
Given Name <i>(first and middle (if any))</i>		Family Name <i>or Surname</i>		
David A.		FARBER		
Inventor's Signature <i>David A. Farber</i>			Date <i>5/6/2010</i>	
Residence: City	Ojai	State: CA	Country US	Citizenship US
Mailing Address: 815 Libbey Ave.				
City	Ojai	State CA	Zip 93023	Country US

NAME OF SECOND INVENTOR:				
Given Name <i>(first and middle (if any))</i>		Family Name <i>or Surname</i>		
Ronald D.		LACHMAN		
Inventor's Signature <i>[Signature]</i>			Date <i>5/12/2010</i>	
Residence: City	Northbrook	State IL	Country US	Citizenship US
Mailing Address 3140 Whisperwoods Ct.				
City	Northbrook	State IL	Zip 60062	Country US

Electronic Acknowledgement Receipt

EFS ID:	7600597
Application Number:	11980687
International Application Number:	
Confirmation Number:	6761
Title of Invention:	CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM
First Named Inventor/Applicant Name:	David A. Farber
Customer Number:	75948
Filer:	Brian Siritzky
Filer Authorized By:	
Attorney Docket Number:	2618-0017
Receipt Date:	12-MAY-2010
Filing Date:	31-OCT-2007
Time Stamp:	17:21:32
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Miscellaneous Incoming Letter	2618_0017_PA_Letter_re_Terminal_Disclaimer_05_12_2010.pdf	187136 <small>7c421fa8a83c7a4d495ea39a85b50e017cf7c4b6</small>	no	2

Warnings:

Information:

2	Transmittal Letter	2618_0017_PA_Xmittal_supp_ decl_05_12_2010.pdf	149964 4a1fea808dfdcf38d51afb835c6a9fca3de1 a9a	no	1
Warnings:					
Information:					
3	Oath or Declaration filed	PA_Supplemental_Decl_signed_ _DAF_RL.pdf	291593 32b3b7f8a88eb55bed9625f879cf6edec704 84fc	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			628693		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF: FARBER, David et al. Application Serial No.: 11/980,687 Application Filing Date: October 31, 2007 Title: CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM	Attorney Docket: 2618-0017 Group Art Unit: 2432 Examiner: LEMMA, S. B. Confirmation No.: 6761 Date: May 12, 2010
---	--

COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE

via EFS-Web

Hon. Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant respectfully provides the following comments on the statement of reasons for allowance that was provided in the *Notice of Allowability* mailed on April 30, 2010.

Applicant assumes that the allowed claims are to be interpreted based on the limitations recited in the claims rather than the paraphrases provided in the statement of reasons for allowance. Further, Applicant assumes that the statement of reasons for allowance is to be taken in light of the exact limitations recited in the allowed claims.

The allowed claims should not be interpreted to include the limitations that are not explicitly recited in the claims. The paraphrases in the statement of reasons for allowance should not be used in a way to narrow the scope of the allowed claims.

While the Applicant agrees that the claims are patentable over the references listed and discussed by the Examiner, Applicant respectfully submits that the claims may be patentable over the references for different and/or additional reasons than those given by the Examiner in the Reasons for

In re Application of: FARBER, David et al.
Application S.N.: 11/980,687
Comments on Reasons For Allowance

Allowance. In addition to the reasons for allowance provided by the Examiner, the Applicant submits that the claims are patentable over the cited references for all of the reasons provided in the Applicant's earlier responses and amendments.

In the *Detailed Action* accompanying the Notice of Allowance, the Examiner states (at §3, pg. 3):

Terminal Disclaimer is also filed since most of the independent claims are found to be similar to the independent claims which are recited in the following Patents (6928442, 6415280, 5978791, 6928442, 6415280 and 5978791).

As noted in the interview summary (below), the Examiner indicated that he might issue a double patenting rejection with respect to U.S. Patent No. 6,928,442 and suggested that the filing of a terminal disclaimer with respect to *that patent* would obviate the need for another action. Accordingly Applicant filed the Terminal Disclaimer in this application on 04/22/2010 *with respect to* U.S. Patent No. 6,928,442.

The Examiner has not indicated that the claims were not patentably distinct from those in U.S. 6,415,280 or 5,978,791. Nor did the Examiner suggest that he would issue any double patenting rejection of the present application with respect to either of those patents, and no such rejection has issued.

Applicant notes that the filing of this terminal disclaimer is not to be construed as an admission of the propriety of any nonstatutory double patenting rejection that might have been made. *Quad Environmental Technologies Corp. v. Union Sanitary District*, 946 F.2d 870 (Fed. Cir. 1991) ("filing of a terminal disclaimer simply serves the statutory function of removing the rejection of double patenting, and raises neither a presumption nor estoppel on the merits of the rejection.").

INTERVIEW SUMMARIES

On April 21 and 22, 2010 the Examiner telephoned the undersigned regarding this application. Those telephone discussions were summarized in Applicant's Supplemental Amendment filed April 22, 2010. As noted in that Amendment, in the telephone interview of April 22, 2010 the claims filed with the RCE on April 17, 2010 were discussed and amendments to those claims were proposed and agreed upon. On April 21, 2010 the Examiner also requested that Applicant file a Terminal Disclaimer with respect to U.S. Patent No. 6,928,442 ("the '442 Patent"). The Examiner did not issue a double patenting rejection with respect to the '442 Patent. He indicated that he would likely issue such a rejection in a forthcoming official action. A Terminal Disclaimer with respect to Patent No. 6,928,442 was submitted to the PTO, along with the required fee.

CHARGE STATEMENT: Deposit Account No. 501860, order no. 2618-0017 .
The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any missing or insufficient fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (<u>missing or insufficiencies only</u>) now or hereafter relative to this application and the resulting Official Document under Rule 20, or credit any overpayment, to our Accounting/Order Nos. shown above.
This CHARGE STATEMENT <u>does not authorize</u> charge of the <u>issue fee</u> until/unless an issue fee transmittal sheet is filed.

CUSTOMER NUMBER 75948	Respectfully submitted, /Brian Siritzky/Reg. No. 37,497
---------------------------------	---

Davidson Berquist Jackson & Gowdey LLP
4300 Wilson Blvd., 7th Floor,
Arlington Virginia 22203
Main: (703) 894-6400 • FAX: (703) 894-6430

By: _____
Brian Siritzky, Ph.D.
Registration No.: 37,497

Electronic Acknowledgement Receipt

EFS ID:	7600796
Application Number:	11980687
International Application Number:	
Confirmation Number:	6761
Title of Invention:	CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM
First Named Inventor/Applicant Name:	David A. Farber
Customer Number:	75948
Filer:	Brian Siritzky
Filer Authorized By:	
Attorney Docket Number:	2618-0017
Receipt Date:	12-MAY-2010
Filing Date:	31-OCT-2007
Time Stamp:	17:36:16
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Post Allowance Communication - Incoming	2618_0017_PA_Comments_on_reasons_for_Allowance_05_12_2010.pdf	256864 <small>097270d75fd3ee369dfaedaa41046c4c1ded5e3a</small>	no	3

Warnings:

Information:

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF:

FARBER, David et al.

Application Serial No.: 11/980,687

Attorney Docket: 2618-0017

Application Filing Date: October 31, 2007

Confirmation No.: 6761

Title: **CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM**

TERMINAL DISCLAIMER
(By Attorney)

Hon. Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Kinetech, Inc. and **Level 3 Communications, LLC**, the **Owners** of **100%** of the instant application hereby disclaim, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term **prior patent** No. **6,928,442** (to which said **Owners** also have legal title) as the term of said **prior patent** is defined in 35 U.S.C. 154 to 156 and 173, and as the term of said **prior patent** is presently shortened (if at all) by any terminal disclaimer. The **Owners** hereby agree that any patent so granted on the instant application shall be enforceable only for and during such period that it and the **prior patent** are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the **Owners** do not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the full statutory term as defined in 35 U.S.C. 154 to 156 and 173 of the **prior patent**, "as the term of said **prior patent** is presently shortened by any terminal disclaimer," in the event that said **prior patent** later: expires for failure to pay a maintenance fee; is held unenforceable; is found invalid by a court of competent jurisdiction; is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321; has all claims canceled by a reexamination certificate; is reissued; or is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.

The undersigned is an attorney of record.

Atty. Sig.: /Brian Siritzky/ Reg. No. 37,497

Name: Brian Siritzky

Telephone No. 703.894.6400

Reg. No: 37,497

Date: May 12, 2010

*Attorney and client: Please note on that other file and also this application file not to assign either separately in view of this disclaimer.

Terminal disclaimer fee under 37 CFR 1.20(d) is enclosed.

STATEMENT UNDER 37 CFR 3.73(B)

Applicant : Farber, et al.	Docket No. 2618-0017
Application No.. 11/980,687	Filed: October 31, 2007
Entitled: CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM	
Assignee: Level 3 Communications, LLC	A Corporation
(Name of assignee)	(Type of Assignee: corporation, partnership, university, government agency, etc.)

States that it is:

1. the assignee of the entire right, title, and interest; or
2. **an assignee of less than the entire right, title and interest.**
(The extent (by percentage) of its ownership interest is 50%)

in the patent application / patent identified above by virtue of either:

A. An assignment from the inventor(s) of the patent application / patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel , Frame , or for which a copy thereof is attached.

OR

B. **A chain of title from the inventor(s), of the patent application / patent identified above, to the current assignee shown below:**

1.	From: <u>Kinetech, Inc.</u> To: <u>Digital Island, Inc.</u> (Assignment of 50%) The document was recorded in the United States Patent and Trademark Office at Reel <u>013306</u> Frame <u>0790</u> . (Document re-recorded to correct an error. Document previously recorded on reel 011233, frame 0164)
2.	From: <u>Digital Island, Inc.</u> To: <u>Cable & Wireless Internet Services, Inc.</u> (change of name) The document was recorded in the United States Patent and Trademark Office at Reel <u>013296</u> Frame <u>0225</u> .
3.	From: <u>Cable & Wireless Internet Services, Inc.</u> To: <u>Savvis Asset Holdings, Inc.</u> (assignment) The document was recorded in the United States Patent and Trademark Office at Reel <u>0015991</u> Frame <u>0869</u> .

- Additional documents in the chain of title are listed on a supplemental sheet.
- Copies of assignments or other documents in the chain of title are attached.

As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[Note: A separate copy (*i.e.*, a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

/Brian Siritzky/Reg. No. 37,497

May 12, 2010

Signature

Date

Brian Siritzky

703.894.6400

Printed or Typed Name

Telephone Number

Registration No. 37,497

Title: Attorney,

STATEMENT UNDER 37 CFR 3.73(B) (CONTINUED)

Application No. 11/980,687

Additional documents in the chain of title from previous sheet.

4.	From: <u>Savvis Asset Holdings, Inc.</u> To: <u>Savvis, Inc.</u> (Change of Name) The document was recorded in the United States Patent and Trademark Office at Reel <u>016686</u> Frame <u>0882</u> .
5.	From: <u>Savvis, Inc.</u> To: <u>Savvis Communications Corporation</u> (Merger) The document was recorded in the United States Patent and Trademark Office at Reel <u>016004</u> Frame <u>0209</u> .
6.	From: <u>Savvis Communications Corporation</u> To: <u>Mount Shasta Acquisition LLC</u> (Assignment) The document was recorded in the United States Patent and Trademark Office at Reel <u>018847</u> Frame <u>0065</u> .
7.	From: <u>Mount Shasta Acquisition LLC</u> To: <u>Level 3 Communications, LLC</u> (Merger) The document was recorded in the United States Patent and Trademark Office at Reel <u>018847</u> Frame <u>0077</u> .

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF: FARBER, David et al. Application Serial No.: 11/980,687 Application Filing Date: October 31, 2007 Title: CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM	Attorney Docket: 2618-0017 Group Art Unit: 2432 Examiner: LEMMA, S. B. Confirmation No.: 6761 Date: May 12, 2010
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TRANSMITTAL OF TERMINAL DISCLAIMER

via EFS-Web

Hon. Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant respectfully submits herewith a *Terminal Disclaimer* by **Kinetech, Inc. and Level 3 Communications, LLC, the Owners of 100% of the instant application.**

Applicant also submits herewith a *Statement Under 37 CFR. 3.73(b)* for **Level 3 Communications, LLC.**

No fee is considered due for this *Terminal Disclaimer*. However, the Commissioner is authorized to charge any fee due herewith to Deposit Account No. 501860, order no. **2618-0017.**

CHARGE STATEMENT: Deposit Account No. 501860, order no. **2618-0017.**

The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any missing or insufficient fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (missing or insufficiencies only) now or hereafter relative to this application and the resulting Official Document under Rule 20, or credit any overpayment, to our Accounting/Order Nos. shown above.

This CHARGE STATEMENT does not authorize charge of the issue fee until/unless an issue fee transmittal sheet is filed.

In re Application of: FARBER, David et al.
Application S.N.: 11/980,687
Transmittal of Terminal Disclaimer

CUSTOMER NUMBER

75948

Davidson Berquist Jackson & Gowdey LLP
4300 Wilson Blvd., 7th Floor,
Arlington Virginia 22203
Main: (703) 894-6400 • FAX: (703) 894-6430

Respectfully submitted,

/Brian Siritzky/Reg. No. 37,497

By: _____

Brian Siritzky, Ph.D.
Registration No.: 37,497

Electronic Acknowledgement Receipt

EFS ID:	7601356
Application Number:	11980687
International Application Number:	
Confirmation Number:	6761
Title of Invention:	CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM
First Named Inventor/Applicant Name:	David A. Farber
Customer Number:	75948
Filer:	Brian Siritzky
Filer Authorized By:	
Attorney Docket Number:	2618-0017
Receipt Date:	12-MAY-2010
Filing Date:	31-OCT-2007
Time Stamp:	18:32:15
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Terminal Disclaimer Filed	PA_Supplmental_Terminal_Disclaimer.pdf	88062 <small>74722759a6d6ecd815d0f8b2b010fd38530f9a4d</small>	no	1

Warnings:

Information:

2	Assignee showing of ownership per 37 CFR 3.73(b).	PA_Statement_37_CFR_3_73_b_level3.pdf	166940	no	2
			1c1fbafa562de04745c3988ebe10dca3ff54ad6e		

Warnings:

Information:

3	Transmittal Letter	2618_0017_PA_Xmittal_supp_TD_05_12_2010.pdf	240275	no	2
			5ea568e390d999aa96afb4842ad29e7e0f4eadfa		

Warnings:

Information:

Total Files Size (in bytes):			495277		
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This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

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New International Application Filed with the USPTO as a Receiving Office

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PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 or Fax (571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

75948 7590 04/30/2010

DAVIDSON BERQUIST JACKSON & GOWDEY, LLP
 ATTN: BRIAN SIRITZKY, Ph.D.
 4300 WILSON BLVD., 7TH FLOOR
 ARLINGTON, VA 22203

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/980,687	10/31/2007	David A. Farber	2618-0017	6761

TITLE OF INVENTION: CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM

APPLN TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	07/30/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
LEMMA, SAMSON B	2432	726-028000

<p>1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</p> <p><input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</p> <p><input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.</p>	<p>2. For printing on the patent front page, list</p> <p>(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,</p> <p>(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.</p>	<p>Davidson Berquist</p> <p>1 _____</p> <p>Jackson & Gowdey, LLP;</p> <p>2 _____</p> <p>Brian Siritzky</p> <p>3 _____</p>
---	--	---

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

<p>(A) NAME OF ASSIGNEE</p> <p>Kinetech, Inc.</p> <p>Level 3 Communications, LLC</p>	<p>(B) RESIDENCE: (CITY and STATE OR COUNTRY)</p> <p>Sherman Oaks, California</p> <p>Broomfield, Colorado</p>
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Please check the appropriate assignee category or categories (will not be printed on the patent) : Individual Corporation or other private group entity Government

<p>4a. The following fee(s) are submitted:</p> <p><input checked="" type="checkbox"/> Issue Fee</p> <p><input type="checkbox"/> Publication Fee (No small entity discount permitted)</p> <p><input type="checkbox"/> Advance Order - # of Copies _____</p>	<p>4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)</p> <p><input type="checkbox"/> A check is enclosed.</p> <p><input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.</p> <p><input checked="" type="checkbox"/> The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number 501860 (enclose an extra copy of this form).</p>
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5. Change in Entity Status (from status indicated above)

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ /Brian Siritzky/	Date _____ May 12, 2010
Typed or printed name _____ Brian Siritzky	Registration No. _____ 37, 497

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. 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, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Electronic Patent Application Fee Transmittal

Application Number:	11980687
Filing Date:	31-Oct-2007
Title of Invention:	CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM
First Named Inventor/Applicant Name:	David A. Farber
Filer:	Brian Siritzky
Attorney Docket Number:	2618-0017

Filed as Large Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Utility Appl issue fee	1501	1	1510	1510

Extension-of-Time:

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Total in USD (\$)				1510

Electronic Acknowledgement Receipt

EFS ID:	7602276
Application Number:	11980687
International Application Number:	
Confirmation Number:	6761
Title of Invention:	CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM
First Named Inventor/Applicant Name:	David A. Farber
Customer Number:	75948
Filer:	Brian Siritzky
Filer Authorized By:	
Attorney Docket Number:	2618-0017
Receipt Date:	12-MAY-2010
Filing Date:	31-OCT-2007
Time Stamp:	21:26:13
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$ 1510
RAM confirmation Number	7838
Deposit Account	501860
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	PA_Issue_Fee_Xmit_05_12_2010.pdf	326308 b2a6cd78029a506903c3a53540f456d0993bac62	no	1

Warnings:

Information:

2	Fee Worksheet (PTO-875)	fee-info.pdf	30198 9580c10dad12ae03534e0bb3524aab64494cb58c	no	2
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Warnings:

Information:

Total Files Size (in bytes): 356506

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111


If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Application Number 	Application/Control No. 11/980,687	Applicant(s)/Patent under Reexamination FARBER ET AL.

Document Code - DISQ	Internal Document – DO NOT MAIL
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TERMINAL DISCLAIMER	<input type="checkbox"/> APPROVED	<input checked="" type="checkbox"/> DISAPPROVED
Date Filed : 4/22/10	This patent is subject to a Terminal Disclaimer	

Approved/Disapproved by:
the td only show 50% interest it should be a 100%. j.proctor



NOTICE OF ALLOWANCE AND FEE(S) DUE

75948 7590 04/30/2010

DAVIDSON BERQUIST JACKSON & GOWDEY, LLP
ATTN: BRIAN SIRITZKY, Ph.D.
4300 WILSON BLVD., 7TH FLOOR
ARLINGTON, VA 22203

EXAMINER
LEMMMA, SAMSON B
ART UNIT PAPER NUMBER
2432
DATE MAILED: 04/30/2010

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.

11/980,687 10/31/2007 David A. Farber 2618-0017 6761

TITLE OF INVENTION: CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM

Table with 7 columns: APPLN. TYPE, SMALL ENTITY, ISSUE FEE DUE, PUBLICATION FEE DUE, PREV. PAID ISSUE FEE, TOTAL FEE(S) DUE, DATE DUE

nonprovisional NO \$1510 \$0 \$0 \$1510 07/30/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 or Fax (571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

75948 7590 04/30/2010

DAVIDSON BERQUIST JACKSON & GOWDEY, LLP
 ATTN: BRIAN SIRITZKY, Ph.D.
 4300 WILSON BLVD., 7TH FLOOR
 ARLINGTON, VA 22203

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/980,687	10/31/2007	David A. Farber	2618-0017	6761

TITLE OF INVENTION: CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	07/30/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
LEMMA, SAMSON B	2432	726-028000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

"Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE _____ (B) RESIDENCE: (CITY AND STATE OR COUNTRY) _____

Please check the appropriate assignee category or categories (will not be printed on the patent) : Individual Corporation or other private group entity Government

4a. The following fee(s) are submitted:

Issue Fee

Publication Fee (No small entity discount permitted)

Advance Order - # of Copies _____

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

A check is enclosed.

Payment by credit card. Form PTO-2038 is attached.

The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. 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, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P. O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
11/980,687 10/31/2007 David A. Farber 2618-0017 6761

75948 7590 04/30/2010

DAVIDSON BERQUIST JACKSON & GOWDEY, LLP
ATTN: BRIAN SIRITZKY, Ph.D.
4300 WILSON BLVD., 7TH FLOOR
ARLINGTON, VA 22203

EXAMINER

LEMMA, SAMSON B

ART UNIT PAPER NUMBER

2432

DATE MAILED: 04/30/2010

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 79 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 79 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No. 11/980,687	Applicant(s) FARBER ET AL.	
Examiner Samson B. Lemma	Art Unit 2432	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. This communication is responsive to RCE filed on 04/19/2010.
- 2. The allowed claim(s) is/are 1-87.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____ .
 - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 - 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
- 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
- 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- 6. Interview Summary (PTO-413), Paper No./Mail Date held on 04/22/2010 .
- 7. Examiner's Amendment/Comment
- 8. Examiner's Statement of Reasons for Allowance
- 9. Other Interview Summary held on 04/22/2010 is attached.

/Jung Kim/
Primary Examiner, AU 2432

Interview Summary	Application No. 11/980,687	Applicant(s) FARBER ET AL.	
	Examiner Samson B. Lemma	Art Unit 2432	

All participants (applicant, applicant's representative, PTO personnel):

- (1) Samson B. Lemma. (3)_____.
- (2) Siritzky PhD Reg. No: 37,497. (4)_____.

Date of Interview: 22 April 2010.

Type: a) Telephonic b) Video Conference
c) Personal [copy given to: 1) applicant 2) applicant's representative]

Exhibit shown or demonstration conducted: d) Yes e) No.
If Yes, brief description: _____.

Claim(s) discussed: Independent claims.

Identification of prior art discussed: Prior art on the record.

Agreement with respect to the claims f) was reached. g) was not reached. h) N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: On March 17, 2010 Examiner and applicant's representative Brian Siritzky PhD Reg. No: 37,497 conducted personal interview and agreed how the claims should be amended in order to overcome the ground of rejection and possible make the application allowable. Accordingly, applicant's representative filed an RCE on 04/19/2010 amending most of the independent claims according to what is agreed on 03/17/2010. However a close review of the submitted claims revealed that some of the independent claims were not amended accordingly. Thus on 04/22/2010, Examiner and Applicant's representative Brian Siritzky PhD Reg. No: 37,497 conducted a second examiner initiated telephonic interview discussing how the some of the independent claims should be amended to overcome the prior art and possible 101 rejection. In view of this understanding on 04/22/2010 applicant's representative filed a supplemental amendment according to what is discussed on the interview. Claims 1-87 are pending of which claims 1, 20, 21, 24, 66-71, 81 and 86 are independent. Every Independent claim is either amended or new.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

/Samson B Lemma/
Examiner, Art Unit 2432

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/19/2010 has been entered.
2. On March 17, 2010 Examiner and applicant's representative Brian Siritzky PhD Reg. No: 37,497 conducted personal interview and agreed how the claims should be amended in order to overcome the ground of rejection and possible make the application allowable. Accordingly, applicant's representative filed an RCE on 04/19/2010 amending most of the independent claims according to what is agreed on 03/17/2010. However a close review of the submitted claims revealed that some of the independent claims were not amended accordingly. Thus on 04/22/2010, Examiner and Applicant's representative Brian Siritzky PhD Reg. No: 37,497 conducted a second examiner initiated telephonic interview discussing how the some of the independent claims should be amended to overcome the prior art and possible 101 rejection. In view of this understanding on 04/22/2010 applicant's representative filed a supplemental amendment according to what is discussed on the interview. Claims 1-87 are pending of which claims 1, 20, 21, 24, 66-71,

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81 and 86 are independent. Every Independent claim is either amended or new.

3. Terminal Disclaimer is also filed since most of the independent claims are found to be similar to the independent claims which are recited in the following Patents (6928442, 6415280, 5978791, 6928442, 6415280 and 5978791).

Allowable Subject Matter

4. Claims 1-87 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

With respect to independent claims, the art on record discloses most of the limitations recited in the previous independent claims. In other words, before the RCE which is filed on 04/19/2010 and the supplemental amendment which is filed on 04/23/2010, the art on the record discloses most of the limitations recited in the previous independent claims.

For instance regarding, the previous **independent claim 1**, **Blickenstaff, the art on the record, discloses a method, in a system which includes a network of computers** [See at least column 4, lines 23-28 and figure "1/local area network", ref. Num " 21, 22 and 42" and column 1, lines 6-8, "this invention relates to data communication networks, such as local area networks, that function to interconnect a plurality of data processors"] (Note: as it is disclosed on column 4, lines 26-

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28, "processors, shown on figure 1, are either personal computers, work stations or mini-computers") **the method comprising:**

- **(a) obtaining a name for a data item, the name being included in a request for the data item** [Figure 8, ref. Num "801-803" and column 13, lines 34-46,], ("4. File management scheme, including access methods. For example, DOS data files are named with a 1-8 byte name and a 0-3 byte extent, which are delimited by a "." (nnnnnnnnn.xxx). The directory architecture is illustrated in FIG. 13 and takes the form of a hierarchical tree of directory names. The root is typically a volume, from which a number of directories branch. Each directory includes other directories and/or data files. A full data file name is represented by concatenating all the directory tree structure components from the root to the particular data file, with components being delimited by " ". An example of such a data file name using this convention is " vol\dir1\ dir3\ filename.ext".) **and**

Blickenstaff further discloses,

based on said name, determine the location of the file and providing the requesting computer obtain the requested file from its own storage device or from the different server, distinct from the requesting computer. [See figure 8, and Column 5, lines 38-57]

Blickenstaff does not explicitly disclose

- **the name being based at least in part on the data which comprise the contents of the data item; and (b) determining, based**

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at least in part on said name, whether or not access to the data item is authorized.

However, in the same field of endeavor **Orita at least on its abstract discloses the following which meets the above limitation.**

“When a specified file access is requested after the execution of the user program, **whether execution of the file access is permitted or not is determined according to access protection information.** The access protection information is information having access types **and file contents defined by the environment profile information.”**

Referring to the previous independent claim 20. Blickenstaff, the art on the record,

discloses a method comprising: controlling distribution of licensed content (*column 5, lines 28-35, see “migration of files”*) **from a first computer** [*Figure 1, ref. 41 and 43 or storage server processor 51*] **to a requesting computer** [*Figure 1, ref. Num “21” and “22”*] **in response to a request for the content from said requesting computer,** [*See figure 8, and Column 5, lines 38-57*]

the request including at least a name of the data file, [*Figure 8, ref. Num “801-803” and column 13, lines 34-46,*] (*“4. File management scheme, including access methods. For example, DOS data files are named with a 1-8 byte name and a 0-3 byte extent, which are delimited by a “.” (nnnnnnnn.xxx). The directory architecture is illustrated in FIG. 13 and*

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takes the form of a hierarchical tree of directory names. The root is typically a volume, from which a number of directories branch. Each directory includes other directories and/or data files. A full data file name is represented by concatenating all the directory tree structure components from the root to the particular data file, with components being delimited by " ". An example of such a data file name using this convention is "vol\dir1\dir3\filename.ext".)

Blickenstaff further discloses,

based on said name, determine the location of the file and providing the requesting computer obtain the requested file from its own storage device or from the different server, distinct from the requesting computer. [See figure 8, and Column 5, lines 38-57]

Blickenstaff does not explicitly disclose the limitation recited as, the name having been determined using at least a function of the data comprising the data item, permitting the content to be provided to the requesting computer if the content is authorized or licensed.

However, in the same field of endeavor Orita at least on its abstract discloses the following which meets the above limitation.

“When a specified file access is requested after the execution of the user program, **whether execution of the file access is permitted or not is determined according to access protection information.** The

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access protection information is information having access types **and file contents defined by the environment profile information.**"

Referring to the previous independent claim 21, the art on the record, Blickenstaff discloses a method comprising:

(a) obtaining a list of names, one for each of a plurality of data items, wherein, for each of the data items *[Figure 8, ref. Num "801-803" and column 13, lines 34-46,],* (*"4. File management scheme, including access methods. For example, DOS data files are named with a 1-8 byte name and a 0-3 byte extent, which are delimited by a "." (nnnnnnnn.xxx). The directory architecture is illustrated in FIG. 13 and takes the form of a hierarchical tree of directory names. The root is typically a volume, from which a number of directories branch. Each directory includes other directories and/or data files. A full data file name is represented by concatenating all the directory tree structure components from the root to the particular data file, with components being delimited by ".". An example of such a data file name using this convention is "vol\dir1\ dir3\ filename.ext".)* ,

(b) receiving, from a requestor, an identifier for a requested data item *[Figure 8, ref. Num "801-803" and column 13, lines 34-46,],*

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Blickenstaff further discloses,

based on said name, determine the location of the file and providing the requesting computer obtain the requested file from its own storage device or from the different server, distinct from the requesting computer. [See figure 8, and Column 5, lines 38-57]

Blickenstaff does not explicitly disclose the limitation recited as,

the corresponding name for that data item was determined as a function of the contents of the data item; said identifier having been determined based at least in part on the contents of the requested data item; (c) determining, based at least in part on said identifier for said requested data item, and using said list of names, whether the requestor may access the requested data item; and (d) based on said determining, if it is determined that requestor may not access the requested data item, denying access to the requested data item.

However, in the same field of endeavor **Orita** at least on its abstract discloses the following which meets the above limitation.

“When a specified file access is requested after the execution of the user program, whether execution of the file access is permitted or not is determined according to access protection information. The access protection information is information having access types and file contents defined by the environment profile information.”

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However with respect to the new supplemental independent claims 1, 20, 21, 24, 66-71, 81 and 86, the art on record does not disclose, teach or fairly suggest the combination of the limitations, including

A computer-implemented method implemented at least in part by hardware comprising one or more processors~ the method comprising:

(a) obtaining a list of content-dependent names, one for each of a plurality of data items, wherein, for each particular data item of the plurality of data items, the corresponding content-dependent name for that particular data item is based at least in part on a function of at least some of the contents of the particular data item, wherein the function comprises a message digest function or a hash function, and wherein two identical data items have the same content- dependent name on the list of content-dependent names;

(b) receiving at a first location, and from a second location distinct from said first location, a content-dependent identifier corresponding to a particular requested data item, said content-dependent identifier being based at least in part on at least some of the contents of the particular data item c) at said first location, by a processor, by hardware in combination with software, determining, based at least in part on said content-dependent identifier for said particular ~ data item, and using said list of content- dependent names, whether a requestor may access the particular requested data item; and

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(d) based on said determining in (c), if it is determined that the requestor may not access the particular requested data item, causing access to the particular requested data item to be denied.

Examiner Note: This application claims priority up to 04/11/1995.

US Publication No. 2005/0010792 A1, to Carpentier teaches the same concept but the effective filing date is after the effective filing date of the application.

None of the prior art of record taken singularly or in combination teaches or suggests the above general concepts. For this reason, independent claims **1, 20, 21, 24, 66-71, 81 and 86** are found to be novel and are allowed.

Examiner finally points out that this application is also distinct from the reference US Patent 5202982 to Gramlich et al, because unlike the current application, **Gramlich et al, is only focused on the method and apparatus on how a database component file to be added to the database is given a unique name that is dependent upon the contents of the file such that, when the contents of the source file changes, the name of the corresponding database component file to be added to the database also changes. Conversely, if two database component files have identical information contained therein, the same file name will be generated and the duplication of information in the database is prevented by providing a simple test that checks for the existence of the name of the database component file before the**

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generation and addition of the file to the database. If the file name exists in the database, the information is already contained in the database and the file is not generated and added to the database information **and furthermore, unlike the current application, Gramlich et al also focuses on** how an index file is generated for at least one database component file, said index file comprising a listing of symbols and the name of the database component file the symbol occurs in and the steps for performing a query for at least one symbol comprising: reading the index file for the occurrence of the symbol; if an occurrence of the symbol is found in the index file, reading the database component file, the index file specifies the symbol to be in, to identify the line number in each source file where symbol occurs; and retrieving each line of text in each source file where the symbol occurs identified by reviewing the database component file and providing each line of text to the user as a response to the query **but this distinct from the current application because the current application is focused on getting a hash request from first computer to the second remote computer in the network. In other words the current application is focused on (a)** obtaining a list of content-dependent names, one for each of a plurality of data items, wherein, for each particular data item of the plurality of data items, the corresponding content-dependent name for that particular data item is based at least in part on a function of at least some of the contents of the particular data item, wherein the function comprises a message digest function or a hash function, and wherein two identical data items have

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the same content- dependent name on the list of content-dependent names;

(b) receiving at a first location, and from a second location distinct from said first location, a content-dependent identifier corresponding to a particular requested data item, said content-dependent identifier being

based at least in part on at least some of the contents of the particular data item c) at said first location, by a processor, by hardware in

combination with software, determining, based at least in part on said content-dependent identifier for said particular ~ data item, and using

said list of content- dependent names, whether a requestor may access the particular requested data item; and

(d) based on said determining in (c), if it is determined that the requestor

may not access the particular requested data item, causing access to the particular requested data item to be denied.

5. The dependent **claims** which are dependent on the above **independent claims** being further limiting to the independent claim/s, definite and enabled by the specification are also allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays,

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should preferably accompany the issue fee. Such submission should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samson B Lemma whose telephone number is 571-272-3806. The examiner can normally be reached on Monday-Friday (8:00 am---4: 30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BARRON JR GILBERTO can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Samson B Lemma/
Examiner, Art Unit 2432

/Jung Kim/
Primary Examiner, AU 2432

Notice of References Cited	Application/Control No. 11/980,687	Applicant(s)/Patent Under Reexamination FARBER ET AL.	
	Examiner Samson B. Lemma	Art Unit 2432	Page 1 of 1

U.S. PATENT DOCUMENTS

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A US-5,202,982	04-1993	Gramlich et al.	1/1
*	B US-2005/0010792	01-2005	Carpentier et al.	713/193
	C US-			
	D US-			
	E US-			
	F US-			
	G US-			
	H US-			
	I US-			
	J US-			
	K US-			
	L US-			
	M US-			

FOREIGN PATENT DOCUMENTS

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N				
	O				
	P				
	Q				
	R				
	S				
	T				

NON-PATENT DOCUMENTS

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)				
	U				
	V				
	W				
	X				

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.


EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2	"20080066191"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/04/24 13:37
L2	1877	(726/27).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/04/24 13:45
L3	933	(726/28).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/04/24 13:45
L4	626	(726/29).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/04/24 13:45
L5	654	(713/181).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/04/24 13:46
L6	2	("6928442").pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/04/24 13:49
L7	2	("6415280").pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/04/24 13:49
L8	2	("5978791").pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/04/24 13:49

L9	2	("6928442").pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/04/24 13:50
L10	2	("6415280").pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/04/24 13:50
L11	2	("5978791").pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/04/24 13:50

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Index of Claims 	Application/Control No. 11980687	Applicant(s)/Patent Under Reexamination FARBER ET AL.
	Examiner Samson B Lemma	Art Unit 2432

✓	Rejected
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-	Cancelled
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N	Non-Elected
I	Interference

A	Appeal
O	Objected

Claims renumbered in the same order as presented by applicant
 CPA
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 R.1.47

CLAIM		DATE							
Final	Original	05/10/2009	02/20/2010	04/23/2010					
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Index of Claims 	Application/Control No. 11980687	Applicant(s)/Patent Under Reexamination FARBER ET AL.
	Examiner Samson B Lemma	Art Unit 2432

✓	Rejected
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A	Appeal
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Claims renumbered in the same order as presented by applicant
 CPA
 T.D.
 R.1.47

CLAIM		DATE							
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Index of Claims 	Application/Control No. 11980687	Applicant(s)/Patent Under Reexamination FARBER ET AL.
	Examiner Samson B Lemma	Art Unit 2432

✓	Rejected
=	Allowed


-	Cancelled
÷	Restricted

N	Non-Elected
I	Interference

A	Appeal
O	Objected

Claims renumbered in the same order as presented by applicant
 CPA
 T.D.
 R.1.47

CLAIM		DATE							
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Search Notes 	Application/Control No. 11980687	Applicant(s)/Patent Under Reexamination FARBER ET AL.
	Examiner Samson B Lemma	Art Unit 2432

SEARCHED			
Class	Subclass	Date	Examiner
726	27,28, 29	04/23/2010	SL
713	181	04/23/2010	SL

SEARCH NOTES		
Search Notes	Date	Examiner
713/\$, 726/\$ (With text Search)	04/23/2010	SL
EAST (Search is Updated and Interference Search is done)	04/23/2010	SL
NPL (IEEE, ACM DIGITAL LIBRARY, GOOGLE, CITeseer)	04/23/2010	SL
Inventor's name Search, the following patents have been examined. (6928442, 6415280, 5978791, 6928442, 6415280 and 5978791) and TD is filed.	04/23/2010	SL

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner
Interference Search History Printout	Interference Search History Printout	04/23/2010	SL

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 1 of 4	Application No.	11/980,687
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2432
	Examiner Name	LEMMA, SAMSON B.
	Attorney Docket No.	2618-0017
	Confirmation No.	6761

U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No.	Document No.	Publication/ Issue Date	Name of Patentee or Applicant of Cited Document
/S.L./	1-1	US-5491817	February 1996	Gopal et al.
/S.L./	1-2	US-5581764	December 1996	Fitzgerald et al.
/S.L./	1-3	US-5600834	February 1997	Howard
/S.L./	1-4	US-5630067	1997/05	Kindell et al.
/S.L./	1-5	US-5694596	December 1997	Campbell
/S.L./	1-6	US-5701316	December 1997	Alferness et al.
/S.L./	1-7	US-5710922	January 1998	Alley et al.
/S.L./	1-8	US-5757915	May 1998	Aucsmith et al.
/S.L./	1-9	US-5907619	May 1999	Davis
/S.L./	1-10	US-5991414	November 1999	Garay et al.
/S.L./	1-11	US-6135646	2000/10/24	Kahn et al.
	1-12			
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Examiner Signature	/Samson Lemma/	Date Considered	04/24/2010
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)	Application No.	11/980,687
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2432
	Examiner Name	LEMMA, SAMSON B.
	Attorney Docket No.	2618-0017
Sheet 2 of 4	Confirmation No.	6761

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Document No.	Publication Date	Name of Patentee or Applicant of Cited Document	Notes
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/S.L./	2-2	WO 97/43717	1997/11/20	Kahn	
	2-3				
	2-4				
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Examiner Signature	/Samson Lemma/	Date Considered	04/24/2010
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant. Notes: If identified, the following is provided: EA = English Abstract, T = Translation, PT = Partial Translation, SOR = Statement of Relevancy, PF = Patent Family.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 3 of 4	Application No.	11/980,687
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2432
	Examiner Name	LEMMA, SAMSON B.
	Attorney Docket No.	2618-0017
	Confirmation No.	6761

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
/S.L./	3-1	FOWLER, et al. "A User-Level Replicated File System," AT&T Bell Laboratories Technical Memorandum 0112670-930414-05, April 1993, and USENIX 1993 Summer Conference Proceedings, Cincinnati, OH, June 1993.	
/S.L./	3-2	GREENE, D., et al., "Multi-Index Hashing for Information Retrieval", Nov. 20-22, 1994, Proceedings, 35th Annual Symp on Foundations of Computer Science, IEEE, pgs. 722 - 731.	
/S.L./	3-3	HIRANO, et al, "Extendible hashing for concurrent insertions and retrievals," in Proc 4th Euromicro Workshop on Parallel and Distributed Processing, 1996 (PDP '96), Jan. 24, 1996 to Jan. 26, 1996, pgs. 235 – 242, Braga , Portugal.	
/S.L./	3-4	PRENEEL et al., "The Cryptographic Hash Function RIPEMD-160", appeared in CryptoBytes RSA Laboratories, vol. 3, no. 2, pp. 9-14, Fall, 1997 (also Bosselaers et al., "The RIPEMD-160 Cryptographic Hash Function", Jan. 1997, Dr. Dobb's Journal, pp. 24-28)	
/S.L./	3-5	PRUSKER et al., "The Siphon: Managing Distant Replicated Repositories" Nov. 8-9, 1990, Proc. Management of Replicated Data IEEE.	
/S.L./	3-6	Reply to Examination Report, Munich, Nov. 18, 2009, in Application No. EP 96 910 762.2 [19 pgs.]	
/S.L./	3-7	RICH, K. et al, "Hobgoblin: A File and Directory Auditor", Sep. 30-Oct. 3, 1991, Lisa V., San Diego, CA.	

Examiner Signature	/Samson Lemma/	Date Considered	04/24/2010
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant. Notes: If identified, the following is provided: EA = English Abstract, T = Translation, PT = Partial Translation, SOR = Statement of Relevancy, PF = Patent Family.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)	Application No.	11/980,687
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2432
	Examiner Name	LEMMA, SAMSON B.
	Attorney Docket No.	2618-0017
Sheet 4 of 4	Confirmation No.	6761

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
/S.L./	4-1	U.S. Reexam Control No. 90/010,260 - 2010-04-08 PTO Notice of Intent to Issue Ex Parte Reexamination Certificate	
/S.L./	4-2	USPTO Final Office Action in U.S. Appln. No. 10/742,972, 12/22/2009.	
/S.L./	4-3	USPTO, Advisory Action, 03/23/2010, in U.S. Appln. No. 11/980,679.	
/S.L./	4-4	USPTO, Final Office Action in U.S. Reexam Control No. 90/010,260, January 29, 2010.	
/S.L./	4-5	USPTO, Final Office Action mailed 01/12/2010 in U.S. Appln. No. 11/980,679.	
	4-6		
	4-7		

Examiner Signature	/Samson Lemma/	Date Considered	04/24/2010
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant. Notes: If identified, the following is provided: EA = English Abstract, T = Translation, PT = Partial Translation, SOR = Statement of Relevancy, PF = Patent Family.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified) Sheet 1 of 1	Application No.	11/980,687
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2432
	Examiner Name	LEMMA, SAMSON B.
	Attorney Docket No.	2618-0017
	Confirmation No.	6761

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
/S.L./	1-1	WIPO, International Preliminary Examination Report (IPER), July, 1997, PCT/US96/04733 [5 pgs.]	
	1-2		
	1-3		
	1-4		
	1-5		
	1-6		
	1-7		

Examiner Signature	/Samson Lemma/	Date Considered	04/24/2010
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant. Notes: If identified, the following is provided: EA = English Abstract, T = Translation, PT = Partial Translation, SOR = Statement of Relevancy, PF = Patent Family.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM PTO-1449 (modified)	Application No.	11/980,687
	Filing Date	October 31, 2007
	First Named Inventor	FARBER, David
	Group Art Unit	2432
	Examiner Name	LEMMA, SAMSON B.
	Attorney Docket No.	2618-0017
	Confirmation No.	6761

Sheet 1 of 1

NON-PATENT REFERENCES			
Examiner Initials*	Cite No.	Non-patent Reference bibliographic information, where available	Notes
	1-1	WIPO, International Preliminary Examination Report (IPER), July, 1997, PCT/US96/04733 [5 pgs.]	
	1-2		
	1-3		
	1-4		
	1-5		
	1-6		
	1-7		

Examiner Signature		Date Considered	
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*Examiner: Initial if reference was considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant. Notes: If identified, the following is provided: EA = English Abstract, T = Translation, PT = Partial Translation, SOR = Statement of Relevancy, PF = Patent Family.

EPA EPO OEB DG 1 Requ:	
06 -08- 1997	
27	ANL ZEICHN

PATENT COOPERATION TREATY

REC'D 25 JUL 1997
PCT

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

96910762.2 (10)

Applicant's or agent's file reference KINET 213987	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/ISA/416)	
International application No. PCT/US96/04733	International filing date (day/month/year) 09 APRIL 1996	Priority date (day/month/year) 11 APRIL 1995
International Patent Classification (IPC) or national classification and IPC IPC(6): G06F 17/30, 15/00 and US Cl.: 395/616		
Applicant KINETECH, INC		

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 5 sheets.

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 1 sheets.

3. This report contains indications relating to the following items:

- I Basis of the report
- II Priority
- III Non-establishment of report with regard to novelty, inventive step or 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 supporting 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 08 NOVEMBER 1996	Date of completion of this report 17 JUNE 1997
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231	Authorized officer THOMAS G. BLACK <i>Tom Bell</i>
Facsimile No. (703) 305-3230	Telephone No. (703) 305-9600

COPY → S.F.

I. Basis of the report

1. This report has been drawn on the basis of (*Substitute 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 the report since they do not contain amendments*):

- the international application as originally filed.
- the description, pages (See Attached) , as originally filed.
 pages _____ , filed with the demand:
 pages _____ , filed with the letter of _____.
 pages _____ , filed with the letter of _____.
- the claims, Nos. (See Attached) , as originally filed.
 Nos. _____ , as amended under Article 19.
 Nos. _____ , filed with the demand.
 Nos. _____ , filed with the letter of _____.
 Nos. _____ , filed with the letter of _____.
- the drawings, sheets/fig (See Attached) , as originally filed.
 sheets/fig _____ , filed with the demand.
 sheets/fig _____ , filed with the letter of _____.
 sheets/fig _____ , filed with the letter of _____.

2. The amendments have resulted in the cancellation of:

- the description, pages NONE .
- the claims, Nos. NONE .
- the drawings, sheets/fig NONE .

3. 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, as indicated in the ~~Supplemental Box~~ Additional observations below (Rule 70.2(c)).

4. Additional observations, if necessary:

NONE

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)	Claims	<u>(Please See supplemental sheet)</u>	YES
	Claims	<u>(Please See supplemental sheet)</u>	NO
Inventive Step (IS)	Claims	<u>(Please See supplemental sheet)</u>	YES
	Claims	<u>(Please See supplemental sheet)</u>	NO
Industrial Applicability (IA)	Claims	<u>(Please See supplemental sheet)</u>	YES
	Claims	<u>(Please See supplemental sheet)</u>	NO

2. CITATIONS AND EXPLANATIONS

Claims 1-4, 11-15, 18-20, 22-32, 35, 38-45 lack novelty under PCT Article 33(2) as being anticipated by Gramlich et al., US Patent No.5,202,982.

As to claim 1, Gramlich taught:

- 1)identity means for determining a unique identifier(col.2, lines 52-55; col.17, lines 14-20);
- 2)existence means for determining whether a particular item is present in the system(col.2,lines 42-48).

As to claims 2-3, Gramlich taught:

- 1)local existence means for determining whether a particular instance is present at a particular location(col.2, lines 42-48).

As to claim 4, Gramlich taught:

- 1)a data associating means between a data item and a corresponding identifier(col.17,lines 38-41);
- 2)access means for accessing a particular data item using corresponding identifier(col.17,lines 45-50).

As to claim 11, Gramlich taught:

- 1)a requesting means for requesting a data item at a current location (col.18, lines 20-21).

As to claim 12, Gramlich taught:

- 1)a context means for making and maintaining a context association between a contextual name of a data item and the identifier thereof(col.17, lines 38-41);
- 2)referencing means for obtaining the identifier of the data item(col.17, lines 45-50).

As to claim 23, Gramlich taught:

- 1)means for verifying the integrity of a data item obtained from the requesting means(col.2, lines 31-32).

(Continued on Supplemental Sheet.)

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

I. BASIS OF REPORT:

This report has been drawn on the basis of the description,
pages, 1-76, as originally filed.
pages, NONE, filed with the demand.
and additional amendments:
NONE

This report has been drawn on the basis of the claims,
numbers, 1-28, 34-53, as originally filed.
numbers, NONE, as amended under Article 19.
numbers, 29-33, filed with the demand.
and additional amendments:
NONE

This report has been drawn on the basis of the drawings,
sheets, 1-24, as originally filed.
sheets, NONE, filed with the demand.
and additional amendments:
NONE

V. 1. REASONED STATEMENTS:

The report as to Novelty was positive (YES) with respect to claims 5-10, 16-17, 21, 33-34, 36-37, 46-53.
The report as to Novelty was negative (NO) with respect to claims 1-4, 11-15, 18-20, 22-32, 35, 38-45.
The report as to Inventive Step was positive (YES) with respect to claims NONE.
The report as to Inventive Step was negative (NO) with respect to claims 1-53.
The report as to Industrial Applicability was positive (YES) with respect to claims 1-53.
The report as to Industrial Applicability was negative (NO) with respect to claims NONE.

V. 2. REASONED STATEMENTS - CITATIONS AND EXPLANATIONS (Continued):

The limitations of claims 13-15, 18-20, 22-32, 35, 38-45 have already been discussed in the preceding paragraph. They are therefore objected on similar grounds.

Claims 1-53 lack an inventive step under PCT Article 33(3) as being obvious over Gramlich et al., as applied to claims 1-4, 11-15, 18-20, 22-32, 35, 38-45 above, in view of Konrad et al., US Patent no. 5,404,508.

In reference to claims 5-10, 16-17, 21, 33-34, 36-37, 46-53, Gramlich did not specifically detail the means for copying the contents of a source file to thereby generate a backup file that is used for restoring and recovering the data items of the source file upon failure. However, Konrad taught an analogous system that detailed the aforementioned features (that the primary reference lacked) as follows:

As to claim 5, Konrad et al. taught:

1) a duplication means for copying a data item from a source to a destination (col.4, lines 48-51; col.7, lines 37-39).

As to claim 6, Konrad et al. taught:

1) an assimilation means for assimilating new data item into the system (col.14, lines 7-10).

As to claim 8, Konrad et al. taught:

1) a backup means for making copies for data items in the system (col.14, lines 4-6).

As to claim 9, Konrad et al. taught:

1) a recovery means for retrieving data previously backed up (col.7, lines 33-48).

As to claim 10, Konrad et al. taught:

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 11

1) a remote existence means for determining whether data is present at a remote location(col.5, lines 10-29).

As to claim 15, Konrad et al. taught:

a transparent access means for accessing a data item from one of several locations(col.5, lines 10-29).

As to claim 21, Konrad et al. taught:

1)means for advertising a data item to different locations in the system(col.6, lines 44-47).

It would have been obvious to one of ordinary skill in the art of data processing to combine the teachings of the cited references because Konrad et al.'s system would increase the reliability of Ramlich's system by allowing it to be available and accessible at all times.

The limitations of claims 7, 16-17, 33-34, 36-37, 46-53 have already been discussed in the preceding paragraph. They are therefore objected to on similar grounds.

----- NEW CITATIONS -----

US 5,404,508 A (KONRAD ET AL) 04 APRIL 1995, see entire document

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF: FARBER, David et al. Application Serial No.: 11/980,687 Application Filing Date: October 31, 2007 Title: CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM	Attorney Docket: 2618-0017 Group Art Unit: 2432 Examiner: LEMMA, Samson B. Confirmation No.: 6761 Date: April 23, 2010
---	--

**INFORMATION DISCLOSURE STATEMENT
(SUPPLEMENTAL)**

via EFS-Web

Hon. Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. § 1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. One copy of each non-U.S. Patent reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

The submission of any document herewith, which is not a statutory bar, is not intended that any such document constitutes prior art against any of the claims of the present application or is considered to be material to patentability as defined in 37 C.F.R. § 1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference against the claims of the present application.

This Information Disclosure Statement is being filed after an RCE, but before an action on the merits. No certification or fee is required.

This IDS cites an International Preliminary Examination Report (IPER) from a related (expired) international application (PCT/US96/04733). The two

In re Application of: FARBER, David et al.
Application S.N.: 11/980,687
IDS filed 04/23/10
Page 2 of 2

references discussed in this IPER (US 5,202,982, and US 5,404,508) have previously been cited and considered by the Examiner in this application.

This IDS is intended to be in full compliance with the rules, but should the Examiner find any part of its requirement content to have been omitted, prompt notice to that effect is earnestly solicited, along with additional time under Rule 97(f), to enable Applicant to comply fully.

CHARGE STATEMENT: Deposit Account No. 501860, order no. 2618-0017 . The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any missing or insufficient fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (<u>missing or insufficiencies only</u>) now or hereafter relative to this application and the resulting Official Document under Rule 20, or credit any overpayment, to our Accounting/Order Nos. shown above, for which purpose a <u>duplicate</u> copy of this sheet is attached. This CHARGE STATEMENT <u>does not authorize</u> charge of the <u>issue fee</u> until/unless an issue fee transmittal sheet is filed.
--

CUSTOMER NUMBER 75948

Respectfully submitted,

/Brian Siritzky/Reg. No. 37,497

Davidson Berquist Jackson & Gowdey LLP
4300 Wilson Blvd., 7th Floor,
Arlington Virginia 22203
Main: (703) 894-6400 • FAX: (703) 894-6430

By: _____
Brian Siritzky, Ph.D.
Registration No.: 37,497

Electronic Acknowledgement Receipt

EFS ID:	7480691
Application Number:	11980687
International Application Number:	
Confirmation Number:	6761
Title of Invention:	Controlling access to data in a data processing system
First Named Inventor/Applicant Name:	David A. Farber
Customer Number:	75948
Filer:	Brian Siritzky
Filer Authorized By:	
Attorney Docket Number:	2618-0017
Receipt Date:	23-APR-2010
Filing Date:	31-OCT-2007
Time Stamp:	18:55:33
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Filed (SB/08)	PA_1449_04_23_2010.pdf	120655 <small>d05c3a222c587e26ac0040f12253d53983bf c6b3</small>	no	1

Warnings:

Information:

This is not an USPTO supplied IDS fillable form

2	NPL Documents	NP0000.pdf	244100	no	5
			a9d0c883020fa0ca183189ce07488b6504388374		

Warnings:

Information:

3	Transmittal Letter	PA_IDS_Supplemental_after_R CE_04_23_10.pdf	199140	no	2
			0301102ddd3d348671cbdabd4967fc0120e740d8		

Warnings:

Information:

Total Files Size (in bytes): 563895

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF:

FARBER, David et al.

Application Serial No.: 11/980,687

Attorney Docket: 2618-0017

Application Filing Date: October 31, 2007

Confirmation No.: 6761

Title: **CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM**

TERMINAL DISCLAIMER
(By Attorney)

Hon. Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The **Owner, Kinetech, Inc.**, of **50%** percent interest in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term **prior patent** No. **6,928,442** (to which said **Owner** also has legal title) as the term of said **prior patent** is defined in 35 U.S.C. 154 to 156 and 173, and as the term of said **prior patent** is presently shortened (if at all) by any terminal disclaimer. The **Owner** hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the **prior patent** are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the **Owner** does not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the full statutory term as defined in 35 U.S.C. 154 to 156 and 173 of the **prior patent**, "as the term of said **prior patent** is presently shortened by any terminal disclaimer," in the event that said **prior patent** later: expires for failure to pay a maintenance fee; is held unenforceable; is found invalid by a court of competent jurisdiction; is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321; has all claims canceled by a reexamination certificate; is reissued; or is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.

The undersigned is an attorney of record.

Atty. Sig.: /Brian Siritzky/ Reg. No. 37,497

Name: Brian Siritzky

Telephone No. 703.894.6400

Reg. No: 37,497

Date: April 22, 2010

*Attorney and client: Please note on that other file and also this application file not to assign either separately in view of this disclaimer.

Terminal disclaimer fee under 37 CFR 1.20(d) is enclosed.

Electronic Patent Application Fee Transmittal

Application Number:	11980687
Filing Date:	31-Oct-2007
Title of Invention:	Controlling access to data in a data processing system
First Named Inventor/Applicant Name:	David A. Farber
Filer:	Brian Siritzky
Attorney Docket Number:	2618-0017

Filed as Large Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Statutory disclaimer	1814	1	140	140
Total in USD (\$)				140

Electronic Acknowledgement Receipt

EFS ID:	7469100
Application Number:	11980687
International Application Number:	
Confirmation Number:	6761
Title of Invention:	Controlling access to data in a data processing system
First Named Inventor/Applicant Name:	David A. Farber
Customer Number:	75948
Filer:	Brian Siritzky
Filer Authorized By:	
Attorney Docket Number:	2618-0017
Receipt Date:	22-APR-2010
Filing Date:	31-OCT-2007
Time Stamp:	16:12:41
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$140
RAM confirmation Number	2496
Deposit Account	501860
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Terminal Disclaimer Filed	PA_Terminal_Dislaimer_by_Att y_wrt_6928442.pdf	84825 e107a003a7480ac5bd224319058c5c4af4f8 ccfc	no	1

Warnings:

Information:

2	Fee Worksheet (PTO-875)	fee-info.pdf	29694 41b8006347ec83bde916bc7d8d72ea837c 3eb2aa	no	2
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Warnings:

Information:

Total Files Size (in bytes):			114519		
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This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF:	Attorney Docket: 2618-0017
FARBER, David et al.	Group Art Unit: 2432
Application Serial No.: 11/980,687	Examiner: LEMMA, S. B.
Application Filing Date: October 31, 2007	Confirmation No.: 6761
Title: CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM	Date: April 22, 2010

SUPPLEMENTAL AMENDMENT

via EFS-Web

Hon. Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Please amend this application as follows:

Amendments to the claims begin on page 2 below.

Remarks begin on page 27 below.

IN THE CLAIMS

Please amend the claims as follows. This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently amended) A computer-implemented method in a system which includes a network of computers, the method implemented at least in part by hardware comprising at least one processor, the method comprising the steps:

(a) at a first computer, obtaining a content-based name for a particular data item from a second computer distinct from the first computer, the content-based name being based at least in part on a function of at least some of the data which comprise the contents of the particular data item, wherein the function comprises a message digest function or a hash function, and wherein two identical data items will have the same content-based name; and

(b) by hardware in combination with software, a processor at said first computer ascertaining whether or not the content-based name for the particular data item corresponds to an entry in a database comprising a plurality of identifiers; and

(c) based at least in part on said ascertaining in (b), determining whether or not access to the particular data item is authorized.

2. (previously presented) A method as recited in claim 1 further comprising:

(d) based at least in part on said determining in (c), causing access to the particular data item to be denied when it is determined that access to the particular data item is not authorized.

3. (previously presented) A method as recited in claim 1 wherein the content-based name for the particular data item was included in a request to access the particular data item, the request having been received from a particular requestor, and wherein said step (c) of determining comprises: determining whether or not the particular requestor is authorized.

4. (previously presented) A method as recited in claim 3 further comprising:

if it is determined that the particular requestor is not authorized, causing the particular requestor's request to access the particular data item to be denied.

5. (previously presented) A method as recited in claim 1 wherein said database comprises a table or a list comprising said plurality of identifiers.

6. (Currently amended) A method as recited in claim 1 wherein the plurality of identifiers in the database are identifiers of licensed content items, and wherein the identifier of each licensed content item is based at least in part on the function of at least some of the data comprising the licensed content item.

7. (previously presented) A method as recited in claim 1 further comprising:

- (d) collecting information regarding the particular data item.

8. (previously presented) A method as recited in claim 7, wherein the information collected includes at least one of: (a) information about which data items have been stored on a computer; (b) information about the content of the particular data item, (c) information about an owner of the particular data item, (d) information about a type of particular data item, (e) information about a contextual name of the particular data item, (f) information about whether the particular data item was copied; (g) the content-based name of the particular data item; (h) information about an identity of a requestor; (i) a timestamp; (j) information about whether the particular data item was created; and (k) information about whether the particular data item was read.

9. (previously presented) A method as recited in claim 7 wherein at least some of the information collected is maintained for accounting or billing purposes.

10. (previously presented) A method as recited in claim 1 further comprising:

- (d) tracking identities of data items.

11. (previously presented) A method as recited in claim 1 wherein the content-based name of the particular data item is based, at least in part, on a function of all of the data which comprise the contents of the particular data item.

12. (previously presented) A method as recited in claim 1 wherein the message digest function or hash function is selected from the functions: MD4, MD5, and SHA.

13. (previously presented) A method as recited in claim 1 wherein the content-based name of the particular data item is a True Name of the particular data item.

14. (Currently amended) A method as recited in claim 1 wherein the particular data item ~~may comprise~~ is selected from the group comprising: a file, a portion of a file, a page in memory, a digital message, a portion of a digital message, a digital image, a portion of a digital image, a video signal, a portion of a video signal, an audio signal, a portion of an audio signal, a software product, and **[[or]]** a portion of a software product.

15. (Original) A method as recited in claim 1 wherein at least some computers make up part of a peer-to-peer network of computers.

16. (previously presented) A method as recited in claim 1 further comprising:

(d) authorizing access to the particular data item when it is not determined that the data item is unauthorized.

17. (previously presented) A method as recited in claim 16 wherein the authorized access permits copying of the particular data item to or from at least one of the computers in said network of computers.

18. (Currently amended) A method as recited in claim 16 wherein the content-based name of the particular data item is received at the **[[a]]** first computer and wherein, if it is not determined that said particular data item is unauthorized, access to the data item is permitted from at least one of a plurality of computers distinct from the first computer.

19. (previously presented) A method as recited in claim 16 wherein, if it is not determined that access to said particular data item is unauthorized, access to the data item is permitted from more than one of a plurality of computers in the network of computers.

20. (Currently amended) A computer-implemented method operable in a system which includes a plurality of computers, the method comprising:

controlling distribution of ~~licensed~~ content from a first computer to **[[a]]** at least one other ~~second~~ computer, in response to a request obtained by a first device in the system from a second device in the system, the first device comprising hardware including at least one processor, the request including at least a content-dependent name of a particular data item, the content-dependent name being based

at least in part on a function of at least some of the data comprising the particular data item, wherein the function comprises a message digest function or a hash function, and wherein two identical data items will have the same content-dependent name,

~~by hardware in combination with software, and,~~ based at least in part on said content-dependent name of said particular data item, the first device (A) permitting the content to be provided to or accessed by the at least one other ~~second~~ computer if it is not determined that the content is unauthorized or unlicensed, otherwise, (B) if it is determined that the content is unauthorized or unlicensed, not permitting the content to be provided to or accessed by the at least one other ~~second~~ computer.

21. (Currently amended) A computer-implemented method implemented at least in part by hardware comprising one or more processors, the method comprising:

(a) obtaining a list of content-dependent names, one for each of a plurality of data items, wherein, for each particular data item of the plurality of data items, the corresponding content-dependent name for that particular data item is based at least in part on a function of at least some of the contents of the particular data item, wherein the function comprises a message digest function or a hash function, and wherein two identical data items have the same content-dependent name on the list of content-dependent names;

(b) receiving at a first location, and from a second location distinct from said first location, a content-dependent identifier corresponding to a particular ~~requested~~ data item, said content-dependent identifier being based at least in part on at least some of the contents of the particular ~~requested~~ data item;

(c) at said first location, by a processor, ~~by hardware~~ in combination with software, determining, based at least in part on said content-dependent identifier for said particular requested data item, and using said list of content-dependent names, whether a requestor may access the particular requested data item; and

(d) based on said determining in (c), if it is determined that the requestor may not access the particular requested data item, causing access to the particular requested data item to be denied.

22. (Currently amended) A method as recited in claim 21 wherein the list of content-dependent names comprises a list of True Names of authorized data items and wherein the content-dependent identifier of the particular requested data item is a True Name of the particular requested data item.

23. (Original) A method as recited in claim 21 wherein at least some of said computers make up part of a peer-to-peer network of computers.

24. (Currently amended) A computer-implemented method implemented at least in part by hardware comprising one or more processors, the method comprising:

(a) using a processor, receiving at a first computer from a requesting second computer, a request regarding ~~for~~ a particular data item, said request including at least a content-dependent name for the particular data item, the content-dependent name being based, at least in part, on at least a function of the data in the particular data item, wherein the data used by the function to determine

the content-dependent name comprises at least some of the contents of the particular data item, wherein the function that was used comprises a message digest function or a hash function, and wherein two identical data items will have the same content-dependent name; and

- (b) in response to said request:
 - (i) causing the content-dependent name of the particular data item to be compared to a plurality of values;
 - (ii) ~~by~~ hardware in combination with software[[,]] determining whether or not access to the particular data item is unauthorized based on whether the content-dependent name of the particular data item corresponds to at least one of said plurality of values, and
 - (iii) based on said determining in step (ii), not allowing ~~a copy of~~ the particular data item to be provided to or accessed by the ~~requesting~~ second computer if it is determined that access to the particular data item is not authorized.

25. (Currently amended) A method as recited in claim 24 further comprising:

in response to said request:

- (iv) allowing the particular data item to be provided to or accessed by the ~~requesting~~ second computer if it is not determined that access to the particular data item is unauthorized.

26. (previously presented) The method of claim 1 wherein the content-based name of the particular data item is based on a function of only the data which comprise the contents of the particular data item.

27. (previously presented) The method of claim 20 wherein the content-dependent name of the particular data item is based on a function of only the data comprising the particular data item.

28. (previously presented) The method of claim 21 wherein, for each particular data item of the plurality of data items, the corresponding content-dependent name for that particular data item was determined as a function of only the contents of that particular data item.

29. (previously presented) The method of claim 24 wherein the data used by the function to determine the content-dependent name of the particular data item comprises only the contents of the particular data item.

30. (previously presented) The method of claim 20 wherein the content-dependent name of the particular data item is based on a function of all of the data comprising the particular data item.

31. (previously presented) The method of claim 21 wherein, for each particular data item of the plurality of data items, the corresponding content-

dependent name for that particular data item was based on a function of all of the contents of that particular data item.

32. (previously presented) The method of claim 24 wherein the data used by the function to determine the content-dependent name of the particular data item comprises of all of the contents of the particular data item.

33. (previously presented) The method of claim 1 wherein the hardware comprises a processor and memory.

34. (previously presented) The method of claim 20 wherein the hardware comprises a processor and memory.

35. (previously presented) The method of claim 21 wherein the hardware comprises a processor and memory.

36. (previously presented) The method of claim 24 wherein the hardware comprises a processor and memory.

37. (previously presented) The method of claim 1 wherein the hardware comprises a computer.

38. (previously presented) The method of claim 20 wherein the hardware comprises a computer.

39. (previously presented) The method of claim 21 wherein the hardware comprises a computer.

40. (previously presented) The method of claim 24 wherein the hardware comprises a computer.

41. (previously presented) The method of claim 1 wherein said content-based name for said particular data item was obtained as part of a request to allow providing of the particular data item to one or more computers in the network of computers, and wherein the determining in (c) whether or not access to the particular data item is authorized comprises:

using at least the content-based name of the particular data item and information in the database to determine whether or not to allow the particular data item to be provided to computers in the network of computers.

42. (previously presented) The method of claim 41 further comprising:
(d) based at least in part on said determining in (c), causing permission to provide the particular data item to computers to be denied when it is determined that access to the particular data item is not authorized.

43. (previously presented) The method as in claim 1 wherein:

the function comprises a message digest function or a hash function applied to at least some of the data in the particular data item to obtain a digital fingerprint of the particular data item.

44. (previously presented) The method of claim 1 wherein the content-based name for the particular data item comprises a digital fingerprint of the particular data item, and wherein each of the plurality of identifiers in the database comprises a digital fingerprint of the corresponding data item.

45. (previously presented) The method of claim 1 wherein, when the particular data item comprises a file or a portion of a file comprising an audio signal, the content-based name of the particular data item is a function of at least some of the data comprising the audio signal.

46. (previously presented) The method as in claim 1 wherein, when the particular data item comprises a file or a portion of a file comprising a video signal, the content-based name of the particular data item is a function of at least some of the data comprising the video signal.

47. (Currently amended) A method as recited in claim 1 wherein, when it is not determined in step (c) that access to said particular data item is **[[not]]** unauthorized, providing of the particular data item is permitted to or from one or more computers in the network of computers.

48. (previously presented) A method as recited in claim 16 wherein the authorizing access to the particular data item authorizes providing the particular data item to or from one or more computers in the network of computers.

49. (Currently amended) The method of claim 21 wherein determining in (c) whether the requestor may access the particular ~~requested~~ data item comprises:

using at least the content-dependent identifier of the particular ~~requested~~ data item and the list of content-dependent names to determine whether or not the requestor is authorized to allow copying of the particular data item.

50. (previously presented) The method of claim 1 wherein determining whether or not access to the particular data item is authorized comprises determining whether or not access to the particular data item is not unauthorized.

51. (previously presented) The method of claim 1 wherein the content-based name for the particular data item corresponds to an entry in the database when the content-based name for the particular data item matches one of the plurality of identifiers in the database.

52. (previously presented) The method of claim 1 wherein said database maps each identifier of said plurality of identifiers in said database to information relating to a corresponding data item.

53. (previously presented) A method as recited in claim 1 further comprising:

(d) permitting at least one copy of the particular data item to be distributed to or from at least one computer in the network when it is determined that the particular data item is not unauthorized.

54. (Currently amended) The method of claim 1 further comprising:

(d) based at least in part on said determining in (c), causing denial of permission for at least one copy of the particular file to be distributed across the plurality of computers in a network when it is determined that ~~access to~~ the file is not authorized.

55. (Currently amended) The method of claim 1 ~~wherein said step (a) of obtaining~~ further comprising the step comprises:

[[a1]] (i) by hardware in combination with software, determining said content-based name for said particular data item.

56. (Currently amended) The method of claim 55 further comprising:

obtaining a copy of the particular data item, and wherein the step [[a1]] (i) determines the content-based name using the copy of the particular data item.

57. (previously presented) The method of claim 1 further comprising:

obtaining the database.

58. (previously presented) The method of claim 1 wherein the content-based name for said particular data item is based, at least in part, on a size or length of the particular data item.

59. (previously presented) The method of claim 51 wherein the content-based name for the particular data item corresponds to an entry in the database when the content-based name for the particular data item exactly matches one of the plurality of identifiers in the database.

60. (previously presented) The method of claim 1 wherein the database comprises a table or a list identifying data items which may only be used by licensed users.

61. (previously presented) The method of claim 1 wherein the database comprises a table identifying license information associated with data items, and wherein the table is indexed at least by the identifiers of data items.

62. (previously presented) The method of claim 1 wherein, wherein the database comprises a table containing a plurality of records, and wherein a record of the table records a relationship between a specific data item and users licensed to have access to that specific data item.

63. (previously presented) The method of claim 1, wherein the plurality of identifiers in the database are identifiers of licensed content items.

64. (previously presented) The method of claims 5 wherein the table or list identifies conditions under which certain data items may be used.

65. (Currently amended) A method as recited in claim 1 wherein access to said data item comprises one or more of: (a) copying ~~[[of]]~~ the data item to or from at least one of a plurality of computers; (b) providing ~~[[of]]~~ the data item to at least one of a plurality of computers; (c) reading ~~[[of]]~~ the data item; (d) copying ~~[[of]]~~ the data item; (e) ~~distribution~~ distributing ~~[[of]]~~ the data item; (f) ~~modification~~ modifying ~~[[of]]~~ the data item; (g) ~~storage~~ storing ~~[[of]]~~ the data item; (h) opening ~~[[of]]~~ the data item; (i) publishing ~~[[of]]~~ the data item; (j) writing the data item; (k) moving the data item; and (l) deleting the data item.

66. (Currently amended) A system operable in a network of computers, the system comprising hardware including at least one ~~[[a]]~~ processor, ~~and software,~~ ~~in combination with said hardware,~~ to:

(a) obtain at a first computer, from a second computer distinct from said first computer, a content-based name for a particular data item, the content-based name being based at least in part on a function of at least some of the data which comprise the contents of the particular data item, wherein the function comprises a message digest function or a hash function, and wherein two identical data items will have the same content-based name; and to

(b) ascertain whether or not the content-based name for the particular data item corresponds to an entry in a database comprising a plurality of identifiers; and to

(c) determine, based at least in part on whether or not the particular data item corresponds to an entry in a database, whether or not access to the data item is unauthorized at or by one or more computers distinct from the first computer.

67. (Currently amended) A system operable in a network of computers, the system comprising hardware including at least one ~~[[a]]~~ processor, ~~and software,~~ ~~in combination with said hardware,~~ to:

control distribution of content from a first computer in said network, at a first computer, in response to a request from a second computer distinct from the first computer, the request including at least a content-dependent name of a particular data item, the content-dependent name being based at least in part on a function of at least some of the data comprising the particular data item, wherein the function comprises a message digest function or a hash function, and wherein two identical data items will have the same content-dependent name, and to

based at least in part on said content-dependent name of said particular data item, selectively permit the content to be provided to or from at least one other computer if providing of the content is not determined to unauthorized or unlicensed.

68. (Currently amended) A device operable in a network of computers, the device comprising hardware including at least one ~~[[a]]~~ processor, and software, in combination with said hardware:

(a) to obtain a list of content-dependent names, one content-dependent name for each of a plurality of data items, wherein, for each of the plurality of data items, the corresponding content-dependent name for that data item is based at least in part on a function of at least some of the contents of that data item, wherein the function is a message digest function or a hash function, and wherein two identical data items have the same content-dependent name;

(b) to receive at a first location, from a ~~requestor~~ second location distinct from said first location, an identifier for a particular data item;

(c) to determine, based at least in part on said identifier for said particular data item, and using said list of content-dependent names, whether a ~~[[the]]~~ requestor may access the particular data item; and

(d) based at least in part on said determining, if it is determined that requestor may not access the particular data item, to cause access to the particular ~~requested~~ data item to be denied.

69. (Currently amended) A system operable in a network of computers, the system comprising hardware including at least a processor, and software, in combination with said hardware:

(a) to receive at a first computer, from a second computer, a request regarding a data item, said request including at least a content-dependent name for the data item, the content-dependent name being based at least in part on a function of the data in the data item, wherein the data used by the function to determine the content-dependent name comprises at least some of the contents of the data item, wherein the function that was used is a message digest function or a

hash function, and wherein two identical data items will have the same content-dependent name; and

- (b) in response to said request:
 - (i) to cause the content-dependent name of the data item to be compared to a plurality of values; and
 - (ii) to determine if access to the data item is authorized or unauthorized based on whether or not the content-dependent name corresponds to at least one of said plurality of values, and
 - (iii) based on whether or not it is determined that access to the data item is authorized or unauthorized, to allow the data item to be provided to or accessed by the second computer if it is not determined that access to the data item is unauthorized.

70. (Currently amended) A computer-implemented method operable in a system which includes a network of computers, the system implemented at least in part by ~~comprising~~ hardware including at least one [[a]] processor, ~~and software, in combination with said hardware,~~ the method comprising the steps of:

[[A]] in response to a request at a first computer, from another computer, said request comprising at least a content-based identifier ~~by hardware in combination with software, determining content-based identifier~~ for a particular data item, the content-based identifier for the particular data item being ~~determined~~ based at least in part on a given function of at least some data which comprise the contents of the particular data item, wherein the given function comprises a message digest or a hash function, and wherein two identical data items will have the same content-based identifier:[];

[[B]] (A) ~~by hardware in combination with software, determining whether the content-based identifier for the particular data item corresponds to an entry in a database comprising a plurality of content-based identifiers; and~~

[[C]] (B) based at least in part on said determining in step [[B]] (A), selectively permitting the particular data item to be accessed at or by one or more computers in the network of computers, said one or more computers being distinct from said first computer.

71. (previously presented) A computer-implemented method implemented at least in part by hardware comprising at least one processor and software, in combination with said hardware, the method comprising the steps:

at a first location, by a first computer,

(A) for a particular data item, said particular data item comprising a plurality of segments, for at least some of said plurality of segments, obtaining a corresponding content-dependent segment identifier from another computer at another location, each said corresponding content-dependent segment identifier being based, at least in part, on a given function of at least some of the data comprising the corresponding segment, wherein said given function for content-dependent segment identifier of at least one of the segments comprises at least a message digest function or hash function, and wherein two identical segments will have the same content-dependent segment identifier; and

(B) **[[by]]** hardware in combination with software, ascertaining whether or not at least some of said content-dependent segment identifiers have corresponding entries in a database comprising a plurality of content-dependent identifiers; and

(C) based at least in part on said ascertaining in (B), selectively permitting access to the particular data item at one or more locations distinct from the first location,

wherein, when the particular data item comprises a file or a portion of a file comprising an audio signal, the content-dependent segment identifier of at least one of the plurality of segments for particular data item is a function of at least some of the data comprising the audio signal; and

wherein, when the particular data item comprises a file or a portion of a file comprising an video signal, the content-dependent segment identifier of at least one of the plurality of segments for particular data item is a function of at least some of the data comprising the video signal, and

wherein said selectively permitting access to said particular data item in step (C) comprises one or more of: (a) selectively permitting copying of the data

item to or from at least one of a plurality of computers; (b) selectively permitting providing of the data item to at least one of a plurality of computers; (c) selectively permitting reading of the data item; (d) selectively permitting copying of the data item; (e) selectively permitting distribution of the data item; (f) selectively permitting modification of the data item; (g) selectively permitting storage of the data item; (h) selectively permitting opening of the data item; (i) selectively permitting publishing of the data item; (j) selectively permitting writing the data item; (k) selectively permitting moving the data item; and (l) selectively permitting deleting the data item.

72. (New) The method of claim 1 wherein step (c) comprises:

determining whether or not access to the particular data item is authorized at or by one or more computers distinct from the first computer.

73. (New) The method of claim 20 wherein the first location is the first computer.

74. (New) The method of claim 20 wherein the second location is the second computer.

75. (New) The method of claim 21 wherein the step (c) of determining takes place at said first location.

76. (New) The method of claim 21 wherein the first location receives the content-dependent identifier from the requestor.

77. (New) The system as in claim 67 wherein the at least one other computer is distinct from the first computer.

78. (New) The system as in claim 68 wherein the identifier is received at the first location from the requestor.

79. (New) The system of claim 68 wherein access to the particular data item comprises one or more of: (a) copying the data item to or from at least one of a plurality of computers; (b) providing the data item to at least one of a plurality of computers; (c) reading the data item; (d) copying the data item; (e) distributing the data item; (f) modifying the data item; (g) storing the data item; (h) opening the data item; (i) publishing the data item; (j) writing the data item; (k) moving the data item; and (l) deleting the data item.

80. (New) The system of claim 69 wherein
based on whether or not it is determined that access to the data item is authorized or unauthorized, the system allows the data item to be provided to the second computer from the first computer if it is not determined that access to the data item is unauthorized.

81. (New) A device operable in a network of computers, the device comprising hardware including at least one processor and memory, to:

(a) receive, at said device, from another device in the network, a content-based identifier for a particular sequence of bits, the content-based identifier being based at least in part on a function of at least some of the particular sequence of bits, wherein the function comprises a message digest function or a hash function, and wherein two identical sequences of bits will have the same content-based identifier; and to

(b) compare the content-based identifier of the particular sequence of bits to a plurality of values; and to

(c) selectively allow said particular sequence of bits to be provided to or accessed by other devices depending on whether or not said content-dependent identifier corresponds to one of the plurality of values.

82. (New) The device of claim 81 wherein the particular sequence of bits represent data selected from the group comprising: a file, a portion of a file, a page in memory, a digital message, a portion of a digital message, a digital image, a portion of a digital image, a video signal, a portion of a video signal, an audio signal, a portion of an audio signal, a software product, and a portion of a software product.

83. (New) The method of claim 1 wherein the content-based name for the particular data item comprises a request for the particular data item.

84. (New) The method of claim 24 wherein the request regarding the particular data item is a request for the particular data item.

85. (New) The system as in claim 69 wherein the request regarding the data item is a request for the data item.

86. (New) A device operable in a network of computers, the device comprising hardware, including at least one processor and memory, to:

(a) receive at said device, from another device in the network, a digital identifier for a particular sequence of bits, the digital identifier being based, at least in part, on a given function of at least some of the bits in the particular sequence of bits, wherein the given function comprises a message digest function or a hash function, and wherein two identical sequences of bits will have the same digital identifier; and

(b) selectively allow the particular sequence of bits to be provided to or accessed by other devices in the system, based at least in part on whether or not the digital identifier for the particular sequence of bits corresponds to a value in a plurality of values, each of the plurality of values being based, at least in part, on the given function of at least some of the bits in a corresponding sequence of bits.

87. (New) A device as in claim 86 wherein the device is a computer.

REMARKS

Consideration and allowance of this application are respectfully requested.

By this Amendment, claims 1, 6, 14, 18, 20-22, 24, 25, 47, 49, 54-56, and 65-70 have been amended.

New claims 72-87 have been added.

No claims have been canceled.

It should be appreciated that the Applicant has not invoked 35 U.S.C. §112, paragraph 6, with respect to any term in any claim of the present application. It should further be appreciated that the words "first" and "second" in the claims are used to distinguish or identify, and not to show a serial or numerical limitation.

No new matter has been added by these amendments.

Claims 1-87 are pending in this application.

On April 21 and 22, 2010 the Examiner telephoned the undersigned regarding this application. The claims filed with the RCE on April 17, 2010 were discussed and amendments to those claims were proposed and agreed upon. On April 21, 2010 the Examiner also requested that Applicant file a Terminal Disclaimer with respect to U.S. Patent No. 6,928,442. A Terminal Disclaimer has been submitted to the PTO, along with the required fee.

Applicant again thanks the Examiner for the courtesy extended the applicant and its representative during their various telephone calls.

In re Application of: FARBER, David et al.
Application S.N.: 11/980,687
Supplemental Amendment

CONCLUSION

Applicant respectfully submits that this application is in condition for allowance, and an early action allowing the claims is earnestly solicited.

The Examiner is invited to telephone the undersigned at the number provided to resolve any outstanding issues in this case.

CHARGE STATEMENT: Deposit Account No. 501860, order no. 2618-0017 .
The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any missing or insufficient fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (<u>missing or insufficiencies only</u>) now or hereafter relative to this application and the resulting Official Document under Rule 20, or credit any overpayment, to our Accounting/Order Nos. shown above, for which purpose a <u>duplicate</u> copy of this sheet is attached
This CHARGE STATEMENT <u>does not authorize</u> charge of the <u>issue fee</u> until/unless an issue fee transmittal sheet is filed.

CUSTOMER NUMBER 75948	Respectfully submitted, /Brian Siritzky/Reg. No. 37,497 By: _____ Brian Siritzky, Ph.D. Registration No.: 37,497
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Davidson Berquist Jackson & Gowdey LLP
4300 Wilson Blvd., 7th Floor,
Arlington Virginia 22203
Main: (703) 894-6400 • FAX: (703) 894-6430

Electronic Patent Application Fee Transmittal

Application Number:	11980687
Filing Date:	31-Oct-2007
Title of Invention:	Controlling access to data in a data processing system
First Named Inventor/Applicant Name:	David A. Farber
Filer:	Brian Siritzky
Attorney Docket Number:	2618-0017

Filed as Large Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Claims in excess of 20	1202	16	52	832
Independent claims in excess of 3	1201	2	220	440

Miscellaneous-Filing:

Petition:

Patent-Appeals-and-Interference:

Post-Allowance-and-Post-Issuance:

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				1272

Electronic Acknowledgement Receipt

EFS ID:	7470866
Application Number:	11980687
International Application Number:	
Confirmation Number:	6761
Title of Invention:	Controlling access to data in a data processing system
First Named Inventor/Applicant Name:	David A. Farber
Customer Number:	75948
Filer:	Brian Siritzky
Filer Authorized By:	
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Receipt Date:	22-APR-2010
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Time Stamp:	17:54:22
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$1272
RAM confirmation Number	4140
Deposit Account	501860
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		2618_0017_PA_Supplemental_Amendment_04_22_2010.pdf	298576 3f66b06ce8c340d4040ded609b7b4dfcc0c14b7	yes	28
Multipart Description/PDF files in .zip description					
Document Description			Start	End	
Supplemental Response or Supplemental Amendment			1	1	
Claims			2	26	
Applicant Arguments/Remarks Made in an Amendment			27	28	
Warnings:					
Information:					
2	Fee Worksheet (PTO-875)	fee-info.pdf	31324 3cf9c462bc7ce686283aa5feb7e7806c54559f82	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			329900		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 11/980,687	Filing Date 10/31/2007	<input type="checkbox"/> To be Mailed
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APPLICATION AS FILED – PART I			OTHER THAN SMALL ENTITY				
FOR	NUMBER FILED (Column 1)	NUMBER EXTRA (Column 2)	RATE (\$)	FEE (\$)		RATE (\$)	FEE (\$)
<input type="checkbox"/> BASIC FEE <small>(37 CFR 1.16(a), (b), or (c))</small>	N/A	N/A	N/A			N/A	
<input type="checkbox"/> SEARCH FEE <small>(37 CFR 1.16(k), (l), or (m))</small>	N/A	N/A	N/A			N/A	
<input type="checkbox"/> EXAMINATION FEE <small>(37 CFR 1.16(o), (p), or (q))</small>	N/A	N/A	N/A			N/A	
TOTAL CLAIMS <small>(37 CFR 1.16(i))</small>	minus 20 =	*	X \$ =		OR	X \$ =	
INDEPENDENT CLAIMS <small>(37 CFR 1.16(h))</small>	minus 3 =	*	X \$ =			X \$ =	
<input type="checkbox"/> APPLICATION SIZE FEE <small>(37 CFR 1.16(s))</small>	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT <small>(37 CFR 1.16(j))</small>							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II					OTHER THAN SMALL ENTITY					
	(Column 1)	(Column 2)	(Column 3)		SMALL ENTITY		OR	OTHER THAN SMALL ENTITY		
AMENDMENT	04/22/2010	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)		RATE (\$)	ADDITIONAL FEE (\$)	
	Total <small>(37 CFR 1.16(i))</small>	* 87	Minus	** 71	=	16	OR	X \$52=	832	
	Independent <small>(37 CFR 1.16(h))</small>	* 12	Minus	***10	=	2	OR	X \$220=	440	
	<input type="checkbox"/> Application Size Fee <small>(37 CFR 1.16(s))</small>							OR		
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <small>(37 CFR 1.16(j))</small>							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	1272	

	(Column 1)	(Column 2)	(Column 3)		SMALL ENTITY		OR	OTHER THAN SMALL ENTITY		
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)		RATE (\$)	ADDITIONAL FEE (\$)	
	Total <small>(37 CFR 1.16(i))</small>	*	Minus	**	=		OR	X \$ =		
	Independent <small>(37 CFR 1.16(h))</small>	*	Minus	***	=		OR	X \$ =		
	<input type="checkbox"/> Application Size Fee <small>(37 CFR 1.16(s))</small>							OR		
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <small>(37 CFR 1.16(j))</small>							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE		

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
 ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
 *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
 The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
 /Trina Steptoe/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. 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, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**
 If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 11/980,687	Filing Date 10/31/2007	<input type="checkbox"/> To be Mailed
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APPLICATION AS FILED – PART I			OTHER THAN SMALL ENTITY				
FOR	NUMBER FILED (Column 1)	NUMBER EXTRA (Column 2)	RATE (\$)	FEE (\$)		RATE (\$)	FEE (\$)
<input type="checkbox"/> BASIC FEE <small>(37 CFR 1.16(a), (b), or (c))</small>	N/A	N/A	N/A			N/A	
<input type="checkbox"/> SEARCH FEE <small>(37 CFR 1.16(k), (l), or (m))</small>	N/A	N/A	N/A			N/A	
<input type="checkbox"/> EXAMINATION FEE <small>(37 CFR 1.16(o), (p), or (q))</small>	N/A	N/A	N/A			N/A	
TOTAL CLAIMS <small>(37 CFR 1.16(i))</small>	minus 20 =	*	X \$ =		OR	X \$ =	
INDEPENDENT CLAIMS <small>(37 CFR 1.16(h))</small>	minus 3 =	*	X \$ =			X \$ =	
<input type="checkbox"/> APPLICATION SIZE FEE <small>(37 CFR 1.16(s))</small>	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT <small>(37 CFR 1.16(j))</small>							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II					OTHER THAN SMALL ENTITY				
	(Column 1)	(Column 2)	(Column 3)		SMALL ENTITY		OR	OTHER THAN SMALL ENTITY	
AMENDMENT	04/22/2010	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)		RATE (\$)	ADDITIONAL FEE (\$)
	Total <small>(37 CFR 1.16(i))</small>	* 87	Minus	** 71 = 16	X \$ =		OR	X \$52=	832
	Independent <small>(37 CFR 1.16(h))</small>	* 12	Minus	***10 = 2	X \$ =		OR	X \$220=	440
	<input type="checkbox"/> Application Size Fee <small>(37 CFR 1.16(s))</small>								
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <small>(37 CFR 1.16(j))</small>							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	1272

	(Column 1)	(Column 2)	(Column 3)		SMALL ENTITY		OR	OTHER THAN SMALL ENTITY	
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)		RATE (\$)	ADDITIONAL FEE (\$)
	Total <small>(37 CFR 1.16(i))</small>	*	Minus	** =	X \$ =		OR	X \$ =	
	Independent <small>(37 CFR 1.16(h))</small>	*	Minus	*** =	X \$ =		OR	X \$ =	
	<input type="checkbox"/> Application Size Fee <small>(37 CFR 1.16(s))</small>								
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <small>(37 CFR 1.16(j))</small>							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
 ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
 *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
 The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
 /Trina Steptoe/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. 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, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**
 If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL (Submitted Only via EFS-Web)

Application Number	11/980,687	Filing Date	2007-10-31	Docket Number (if applicable)	2618-0017	Art Unit	2432
First Named Inventor	David A. FARBER			Examiner Name	Lemma, S. B.		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
 Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____

Other _____

Enclosed

Amendment/Reply

Information Disclosure Statement (IDS)

Affidavit(s)/ Declaration(s)

Other _____
 cited documents, Interview Summary (in Remarks section of Amendment)

MISCELLANEOUS

Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____
 (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

Other _____

FEES

The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 501860

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

Patent Practitioner Signature

Applicant Signature

Signature of Registered U.S. Patent Practitioner			
Signature	/Brian Siritzky/	Date (YYYY-MM-DD)	2010-04-19
Name	Brian Siritzky	Registration Number	37497

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. 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, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF:	Attorney Docket: 2618-0017
FARBER, David et al.	Group Art Unit: 2432
Application Serial No.: 11/980,687	Examiner: LEMMA, Samson B.
Application Filing Date: October 31, 2007	Confirmation No.: 6761
Title: CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM	Date: April 19, 2010

**INFORMATION DISCLOSURE STATEMENT
WITH RCE**

via EFS-Web

Hon. Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. § 1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. One copy of each non-U.S. Patent reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

The submission of any document herewith, which is not a statutory bar, is not intended that any such document constitutes prior art against any of the claims of the present application or is considered to be material to patentability as defined in 37 C.F.R. § 1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference against the claims of the present application.

This Information Disclosure Statement is being filed with an RCE. No certification or fee is required.

The Examiner's attention is again directed to the following co-pending U.S. Patent Applications which are directed to related technical subject matter. The Examiner is respectfully requested to consider the cited application and the art cited therein during examination.

Application No.	Title
10/742,972	De-duplication Of Data In A Data Processing System
11/017,650	Content delivery network and associated methods and mechanisms
11/724,232	Accessing data in a data processing system
11/980,687	Controlling access to data in a data processing system
11/980,679	Distributing and accessing data in a data processing system
11/980,688	Similarity-based access control of data in a data processing system
11/980,677	Content delivery network
EP 96 910 762.2	Identifying Data In A Data Processing System

This IDS cites office actions / communications in related applications/proceedings. In particular, the following are cited herein:

- USPTO Final Office Action in U.S. Appln. No. 10/742,972, 12/22/2009.
- USPTO, Final Office Action mailed 01/12/2010 in U.S. Appln. No. 11/980,679.
- USPTO, Final Office Action in U.S. Reexam Control No. 90/010,260, January 29, 2010.
- Reply to Examination Report, Munich, Nov. 18, 2009, in Application No. EP 96 910 762.2
- USPTO, Advisory Action, 03/23/2010, in U.S. Appln. No. 11/980,679.
- U.S. Reexam Control No. 90/010,260 - 2010-04-08 PTO Notice of Intent to Issue Ex Parte Reexamination Certificate

In the reexamination of U.S. Patent 6,928,442 (hereinafter “the ‘442 Patent”, Control No. 90/010,260), in the final office action of January 29, 2010 (cited herewith), the Examiner finally rejected claims 13, 22, 36, 38, 40, 41, and 56 of the ‘442 Patent. Claims 13, 36, 38, 40, 41, and 56 were finally rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,658,093 (hereinafter “Hellman”). Claim 22 was finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Hellman in view of U.S. Patent No. 5,757,913 (hereinafter “Bellare”). In a response to that final office action (filed March 24, 2010), the Patent Owner canceled the rejected claims 13, 22, 36, 38, 40, 41, and 56 of the ‘442 Patent *without prejudice or disclaimer of their subject matter*. The applicant reserved all rights to pursue some or all of these canceled claims in other applications.

On April 8, 2010 the Office issued a *Notice of Intent to Issue Ex Parte Reexamination Certificate* in the reexamination of U.S. Patent 6,928,442 (control no. 90/010,260). Patent claims 1-12, 14-21, 23-35, 37, 39, and 42-55 were confirmed. Claims 13, 22, 36, 38, 40, 41, and 56 were canceled. No claims were amended or added.

The Examiner’s attention is directed to those reexamination proceedings, and, in particular, to rejected and canceled claims 13, 22, 36, 38, 40, 41, and 56 of the ‘442 Patent as they relate to the pending claims of the present application. For the Examiner’s convenience, copies of those claims are provided here:

13. A method, in a system in which a plurality of files are distributed across a plurality of computers which form a peer-to-peer network, the method comprising:
obtaining a True Name for a data file, the True Name being based at least in part on a given function of the data, wherein the data used by the given function comprises the contents of the particular file; and
determining, using at least the name, whether an unlicensed or unauthorized copy of the data file is present on a particular computer.

22. A method, in a system in which a plurality of files are distributed across a plurality of computers, the method comprising:

- obtaining a name for a data file, the name being based at least in part on an MD5 function of the data which comprises the contents of the particular file; and
- determining, using at least the obtained name, whether an unauthorized or unlicensed copy of the data file is present on a at least one of said computers.

36. In a system in which a data file is distributed across a plurality of computers, a method comprising:

- obtaining a name for the data file, the name being based at least in part on a given function of the data, wherein 15 the data used by the function which comprise the contents of the data file; and
- determining, using at least the name, whether an unauthorized or unlicensed copy of the data file is present on a particular one of said computers. 20

38. Computer-readable media tangibly embodying a program of instructions executable by at least one computer, the program comprising code to: 35

- obtain a True Name for a data file, the True Name being based at least in part on a given function of the data, wherein the data used by the function comprises the contents of the particular file; and
- determine, using at least the name, whether an unauthorized or unlicensed copy of the data file is present on a particular computer. 40

40. Computer-readable media tangibly embodying a program of instructions executable by at least one computer, the program comprising code to:

- obtain a name for the data file, the name being based at least in part on a given function of the data which comprise the contents of the data file; and
- determine, using at least the name, whether an unauthorized or unlicensed copy of the data file is present on a particular one of said computers.

41. Media as in claim 40 wherein the given function is a message digest function or a hash function.

In re Application of: FARBER, David et al.

Application S.N.: 11/980,687

IDS filed with RCE 04/19/10

Page 5 of 6

56. A method, in a system in which a plurality of files are distributed across a plurality of computers, the method comprising:

obtaining a name for a data file, the name being based at least in part on a given function of the data, wherein the data used by the given function comprises the contents of the data file; and

determining, based at least in part on the obtained name, whether a copy of the data file that is present on a at least one of said computers is an unauthorized or unlicensed copy of the file.

As the related U.S. patent applications are stored electronically at the PTO, no copies are being provided herewith. If the Examiner requires copies of any of these applications or any additional information regarding any of the documents cited herein, the Examiner is respectfully requested to contact the undersigned at the number provided.

In re Application of: FARBER, David et al.
Application S.N.: 11/980,687
IDS filed with RCE 04/19/10
Page 6 of 6

This IDS is intended to be in full compliance with the rules, but should the Examiner find any part of its requirement content to have been omitted, prompt notice to that effect is earnestly solicited, along with additional time under Rule 97(f), to enable Applicant to comply fully.

CHARGE STATEMENT: Deposit Account No. 501860, order no. 2618-0017. The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any missing or insufficient fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (<u>missing or insufficiencies only</u>) now or hereafter relative to this application and the resulting Official Document under Rule 20, or credit any overpayment, to our Accounting/Order Nos. shown above, for which purpose a <u>duplicate</u> copy of this sheet is attached. This CHARGE STATEMENT <u>does not authorize</u> charge of the <u>issue fee</u> until/unless an issue fee transmittal sheet is filed.
--

CUSTOMER NUMBER 75948

Respectfully submitted,

/Brian Siritzky/Reg. No. 37,497

Davidson Berquist Jackson & Gowdey LLP
4300 Wilson Blvd., 7th Floor,
Arlington Virginia 22203
Main: (703) 894-6400 • FAX: (703) 894-6430

By: _____
Brian Siritzky, Ph.D.
Registration No.: 37,497

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF:	Attorney Docket: 2618-0017
FARBER, David et al.	Group Art Unit: 2432
Application Serial No.: 11/980,687	Examiner: LEMMA, S. B.
Application Filing Date: October 31, 2007	Confirmation No.: 6761
Title: CONTROLLING ACCESS TO DATA IN A DATA PROCESSING SYSTEM	Date: April 19, 2010

AMENDMENT
WITH REQUEST FOR CONTINUED EXAMINATION (RCE)

via EFS-Web

Hon. Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Amendment is being filed with a *Request for Continued Examination* (RCE). Please amend this application as follows:

Amendments to the Specification begin on page 2 below.

Amendments to the claims begin on page 10 below.

Remarks begin on page 30 below.

An **Interview Summary** begins on page 35.

An **Information Disclosure Statement** is being filed herewith.

In re Application of: FARBER, David et al.
Application S.N.: 11/980,687
Amendment filed with RCE

IN THE SPECIFICATION

Please amend the specification as follows:

Please **replace paragraph 0056** with the following:

[0056] Primitive mechanisms provide fundamental capabilities used to support other mechanisms. The following primitive mechanisms are described:

1. Calculate True Name;
2. Assimilate Data Item;
3. New True File;
4. Get True Name from Path;
5. Link path to True Name;
6. Realize True File from Location;
7. Locate Remote File;
8. Make True File Local;
9. Create Scratch File;
10. Freeze Directory;
11. Expand Frozen Directory;
12. Delete True File;
13. Process Audit File Entry;
14. Begin Grooming;
15. Select For Removal; and
16. End Grooming.

In re Application of: FARBER, David et al.
Application S.N.: 11/980,687
Amendment filed with RCE

Please **replace paragraph 0084** with the following:

[0084] The following primitive mechanisms are described:

1. Calculate True Name;
2. Assimilate Data Item;
3. New True File;
4. Get True Name from Path;
5. Link Path to True Name;
6. Realize True File from Location;
7. Locate Remote File;
8. Make True File Local;
9. Create Scratch File;
10. Freeze Directory;
11. Expand Frozen Directory;
12. Delete True File;
13. Process Audit File Entry;
14. Begin Grooming;
15. Select For Removal; and
16. End Grooming.

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Please **replace the heading** (on pg. 25) between paragraphs 00103-00104 with the following heading (the word "New" is inserted before the words "True File").

3. New True File

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Please **replace paragraph 00104** with the following:

[00104] The New True File process is invoked when processing the audit file **132**, some time after a True File has been assimilated (using the Assimilate Data Item primitive mechanism). Given a local directory extensions table entry record **138** in the local directory extensions table **124**, the New True File process can provide the following steps (with reference to **FIG. 12**), depending on how the local processor is configured:

Please **replace paragraph 00143** with the following:

[00143] Determine the operation in the entry **142** currently being processed (Step S365). If the operation indicates that a file was created or written (Step S366), then assimilate the file using the Assimilate Data Item primitive mechanism (Step S368), use the New True File primitive mechanism to do additional desired processing (such as cache update, compression, and mirroring) (Step S369), and record the newly computed True Name for the file in the audit file record entry (Step S370).

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Please **replace paragraph 00164** with the following:

[00164] A. Identify the segment(s) ~~segment(s)~~ to be read by dividing the specified file offset and length each by the fixed size of a segment (a system dependent parameter), to determine the segment number and number of segments that must be read.

Please **replace paragraph 00276** with the following:

[00276] The inventory can be used for archival of data (making it possible to avoid archiving data when ~~when~~ ~~[[.]]~~ that data is already on a separate volume), for grooming (making it possible to delete infrequently accessed files if they can be retrieved from removable volumes), for version control (making it possible to generate a new version of a CD-ROM without having to copy the old version), and for other purposes.

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Please **replace paragraph 00324** with the following:

[00324] (A) Note every time a file is created or deleted, for instance by monitoring audit entries in the Process Audit File Entry primitive mechanism. When such an event is encountered, create an entry **148** in the accounting log **134** that shows ~~Shows~~ the responsible party and the identity of the file created or deleted.

Please **replace paragraph 00331** with the following:

[00331] (B) Occasionally ~~occasionally~~, compare the contents of each user processor against the license table **136**. For each True Name in the license table do the following:

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Please **replace paragraph 00336** with the following:

[00336] Further, in operation of a DP system incorporating the present invention, multiple copies of data items are avoided (unless they are required for some reason such as backups or mirror copies in a fault-tolerant system). Multiple copies of data items are avoided even when multiple names refer to the same data item. The primitive mechanisms Assimilate Data Items and New True File support this property. Using the Assimilate Data Item primitive mechanism, if a data item already exists in the system, as indicated by an entry in the True File registry **126**, this existence will be discovered by this mechanism, and the duplicate data item (the new data item) will be eliminated (or not added). Thus, for example, if a data file is being copied onto a system from a floppy disk, if, based on the True Name of the data file, it is determined that the data file already exists in the system (by the same or some other name), then the duplicate copy will not be installed. If the data item was being installed on the system by some name other than its current name, then, using the Link Path to True Name primitive mechanism, the other (or new) name can be linked to the already existing data item.

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Please **replace paragraph 00340** with the following:

[00340] When a file is opened (using the ~~open~~ Open File operating system mechanism), it uses the Make True File Local primitive mechanism (either directly or indirectly through the Create Scratch File primitive mechanism) to create a local copy of the file. The Open File operating system mechanism uses the Make True File Local primitive mechanism, which uses the Realize True File from Location primitive mechanism, which, in turn uses the Request True File remote mechanism.

Please **replace paragraph 00365** with the following:

[00365] In operation, the system automatically archives data items as they are created or modified. After a file is created or modified, the Close File operating system mechanism creates an audit file record, which is eventually processed by the Process Audit File Entry primitive mechanism. This mechanism uses the New True File primitive mechanism for any file which is newly created, which in turn uses the Mirror True File background mechanism if the True File is in a mirrored or archived region. This mechanism causes one or more copies of the new file to be made on remote processors.

IN THE CLAIMS

Please amend the claims as follows. This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A computer-implemented method in a system which includes a network of computers, the method comprising the steps:

(a) obtaining a content-based name for a particular data item, ~~the name being included in a request for the data item, and~~ the content-based name being based at least in part on a function of at least some of the data which comprise the contents of the particular data item, wherein the function comprises a message digest function or a hash function, and wherein two identical data items will have the same content-based name; and

(b) by hardware in combination with software, ascertaining whether or not the content-based name for the particular data item corresponds to an entry in a database comprising a plurality of identifiers; and

(c) based at least in part on said ascertaining in (b), determining, ~~based at least in part on said name,~~ whether or not access to the particular data item is authorized.

2. (Currently Amended) A method as recited in claim 1 further comprising:

(d) ~~[(c)]~~ based at least in part on said determining in (c), causing denying access to the particular data item to be denied when it is determined that access to the particular data item is not authorized.

3. (Currently Amended) A method as recited in claim 1 wherein the content-based name for the particular data item was included in a request to access the particular data item, wherein the request having been ~~wherein~~ [[is]] received from a particular requestor, and wherein said step (c) ~~[(b)]~~ of determining comprises: determining whether or not the particular requestor is authorized.

4. (Currently Amended) A method as recited in claim 3 further comprising:
if it is determined that the particular requestor is not authorized, causing denying the particular requestor's request ~~for~~ to access the particular data item to be denied.

5. (Currently Amended) A method as recited in claim 1 wherein said step (b) ~~of determining whether or not the data item is authorized comprises determining whether or not the name is contained in a database~~ comprises a table or a list comprising said ~~[[a]]~~ [[a]] plurality of identifiers.

6. (Currently Amended) A method as recited in claim 1 ~~[[5]]~~ wherein the name for the data item is based on a function of the data which comprise the contents of the data file, and wherein the plurality of identifiers in the database are identifiers of licensed content items, and wherein the identifier of each licensed content item is based at least in part on the function of the data comprising the licensed content item.

7. (Currently Amended) A method as recited in claim 1 further comprising:
(d) collecting information regarding the particular data item.

8. (Currently Amended) A method as recited in claim 7, wherein the information collected includes at least one of: (a) information about which data items have been stored on a computer; (b) information about the content of the particular data item, (c) information about an ~~[[the]]~~ owner of the particular data item, (d) information about a ~~[[the]]~~ type of particular data item, (e) information about a ~~[[the]]~~ contextual name of the particular data item, (f) information about whether the particular data item was copied; (g) the content-based name of the particular data item; (h) information about an identity of a ~~[[the]]~~ requestor; (i) a timestamp; (j) information about whether the particular data item was created; and (k) information about whether the particular data item was read.

9. (Currently Amended) A method as recited in claim 7 ~~[[8]]~~ wherein at least some of the information collected is maintained for accounting or billing purposes.

10. (Currently Amended) A method as recited in claim 1 further comprising:

(d) tracking identities of data items ~~requested~~.

11. (Currently Amended) A method as recited in claim 1 wherein the content-based name of the particular data item is based, at least in part, on a function of all of the data which comprise the contents of the particular data item; ~~and wherein the function is a message digest function or a hash function.~~

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12. (Currently Amended) A method as recited in claim 1 ~~wherein the name is based, at least in part, on a function of the data which comprise the contents of the data item, and~~ wherein the message digest function or hash function is selected from the functions: MD4, MD5, and SHA.

13. (Currently Amended) A method as recited in claim 1 wherein the content-based name of the particular data item is a True Name of the particular data item.

14. (Currently Amended) A method as recited in claim 1 wherein [[a]] the particular data item may comprise a file, a portion of a file, a page in memory, a digital message, a portion of a digital message, a digital image, a portion of a digital image, a video signal, a portion of a video signal, [[or]] an audio signal, a portion of an audio signal, a software product, or a portion of a software product.

15. (Original) A method as recited in claim 1 wherein at least some computers make up part of a peer-to-peer network of computers.

16. (Currently Amended) A method as recited in claim 1 further comprising:

(d) [[(c)]] authorizing access to the particular data item when it is not determined that the data item is unauthorized.

17. (Currently Amended) A method as recited in claim 16 wherein the authorized access permits copying of the particular data item to or from at least one of the ~~plurality of~~ computers in said network of computers.

18. (Currently Amended) A method as recited in claim 16 wherein the content-based name of the particular data item is received at a first computer and wherein, if it is not determined that said particular data item is unauthorized, access to the data item is ~~authorized~~ permitted from at least one of ~~said a~~ plurality of computers distinct from the first computer.

19. (Currently Amended) A method as recited in claim 16 wherein, if it is not determined that access to said particular data item is unauthorized, access to the data item is ~~authorized~~ permitted from more than one of a ~~[[the]]~~ plurality of computers in the network of computers.

20. (Currently Amended) A computer-implemented method comprising:
controlling distribution of licensed content from a first computer to a second requesting computer, in response to a request ~~for the content from said requesting computer~~, the request including at least a content-dependent name of a particular ~~[[the]]~~ data item ~~[[file]]~~, the content-dependent name ~~having been determined using~~ being based at least in part on a function of at least some of the data comprising the particular data item, wherein the function comprises a message digest function or a hash function, and wherein two identical data items will have the same content-dependent name.

by hardware in combination with software, and, based at least in part on said content-dependent name of said particular data item, (A) permitting the content to be provided to the second requesting computer if not determined that the content is unauthorized or unlicensed, otherwise, (B) if it is determined that the content is unauthorized or unlicensed, not permitting the content to be provided to the second computer.

21. (Currently Amended) A computer-implemented method comprising:
- (a) obtaining a list of content-dependent names, one for each of a plurality of data items, wherein, for each particular data item of the plurality of data items, the corresponding content-dependent name for that particular data item ~~was determined~~ is based at least in part on as a function of at least some of the contents of the particular data item, wherein the function comprises a message digest function or a hash function, and wherein two identical data items have the same content-dependent name on the list of content-dependent names;
 - (b) ~~receiving, from a requestor, an~~ a content-dependent identifier corresponding to ~~for~~ a requested data item, said content-dependent identifier ~~having been determined~~ being based at least in part on at least some of the contents of the requested data item;
 - (c) by hardware in combination with software, determining, based at least in part on said content-dependent identifier for said requested data item, and using said list of content-dependent names, whether a [[the]] requestor may access the requested data item; and
 - (d) based on said determining in (c), if it is determined that the requestor may not access the requested data item, causing ~~denying~~ access to the requested data item to be denied.

22. (Currently amended) A method as recited in claim 21 wherein the list of content-dependent names comprises a list of True Names of authorized data items and wherein the content-dependent identifier of the requested data item is a True Name of the requested data item.

23. (Original) A method as recited in claim 21 wherein at least some of said computers make up part of a peer-to-peer network of computers.

24. (Currently Amended) A computer-implemented method comprising:
(a) receiving at a first computer, from a requesting computer, a request for a particular data item file, said request including a content-dependent name for the particular data item file, the content-dependent name ~~having been determined using~~ being based, at least in part, on at least a function of the data in the particular data item file, wherein the data used by the function to determine the content-dependent name comprises at least some of the contents of the particular data item file, wherein the function that was used comprises a message digest function or a hash function, and wherein two identical data items will have the same content-dependent name; and

- (b) in response to said request:
- (i) causing the content-dependent name of the particular data item ~~[[file]]~~ to be compared to a plurality of values;
 - (ii) by hardware in combination with software, determining ~~if~~ whether or not access to the particular data item ~~[[file]]~~ is ~~authorized or~~ unauthorized based on whether the content-dependent name of the

particular data item corresponds to matches at least one of said plurality of values, and

(iii) based on said determining in step (ii) [(i)], not allowing a copy of the particular data item [[file]] to be provided delivered to the requesting computer if it is determined that access to the particular data item [[file]] is not authorized.

25. (Currently Amended) A method as recited in claim 24 further comprising:

in response to said request:

(iv) allowing the particular data item [[file]] to be provided delivered to the requesting computer if it is not determined that access to the particular data item [[file]] is unauthorized.

26. (New) The method of claim 1 wherein the content-based name of the particular data item is based on a function of only the data which comprise the contents of the particular data item.

27. (New) The method of claim 20 wherein the content-dependent name of the particular data item is based on a function of only the data comprising the particular data item.

28. (New) The method of claim 21 wherein, for each particular data item of the plurality of data items, the corresponding content-dependent name for that

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particular data item was determined as a function of only the contents of that particular data item.

29. (New) The method of claim 24 wherein the data used by the function to determine the content-dependent name of the particular data item comprises only the contents of the particular data item.

30. (New) The method of claim 20 wherein the content-dependent name of the particular data item is based on a function of all of the data comprising the particular data item.

31. (New) The method of claim 21 wherein, for each particular data item of the plurality of data items, the corresponding content-dependent name for that particular data item was based on a function of all of the contents of that particular data item.

32. (New) The method of claim 24 wherein the data used by the function to determine the content-dependent name of the particular data item comprises of all of the contents of the particular data item.

33. (New) The method of claim 1 wherein the hardware comprises a processor and memory.

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34. (New) The method of claim 20 wherein the hardware comprises a processor and memory.

35. (New) The method of claim 21 wherein the hardware comprises a processor and memory.

36. (New) The method of claim 24 wherein the hardware comprises a processor and memory.

37. (New) The method of claim 1 wherein the hardware comprises a computer.

38. (New) The method of claim 20 wherein the hardware comprises a computer.

39. (New) The method of claim 21 wherein the hardware comprises a computer.

40. (New) The method of claim 24 wherein the hardware comprises a computer.

41. (New) The method of claim 1 wherein said content-based name for said particular data item was obtained as part of a request to allow providing of the particular data item to one or more computers in the network of computers, and

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wherein the determining in (c) whether or not access to the particular data item is authorized comprises:

using at least the content-based name of the particular data item and information in the database to determine whether or not to allow the particular data item to be provided to computers in the network of computers.

42. (New) The method of claim 41 further comprising:

(d) based at least in part on said determining in (c), causing permission to provide the particular data item to computers to be denied when it is determined that access to the particular data item is not authorized.

43. (New) The method as in claim 1 wherein:

the function comprises a message digest function or a hash function applied to at least some of the data in the particular data item to obtain a digital fingerprint of the particular data item.

44. (New) The method of claim 1 wherein the content-based name for the particular data item comprises a digital fingerprint of the particular data item, and wherein each of the plurality of identifiers in the database comprises a digital fingerprint of the corresponding data item.

45. (New) The method of claim 1 wherein, when the particular data item comprises a file or a portion of a file comprising an audio signal, the content-based name of the particular data item is a function of at least some of the data comprising the audio signal.

46. (New) The method as in claim 1 wherein, when the particular data item comprises a file or a portion of a file comprising a video signal, the content-based name of the particular data item is a function of at least some of the data comprising the video signal.

47. (New) A method as recited in claim 1 wherein, when it is determined that access to said particular data item is not unauthorized, providing of the particular data item is permitted to or from one or more computers in the network of computers.

48. (New) A method as recited in claim 16 wherein the authorizing access to the particular data item authorizes providing the particular data item to or from one or more computers in the network of computers.

49. (New) The method of claim 21 wherein determining in (c) whether the requestor may access the requested data item comprises:

using at least the content-dependent identifier of the requested data item and the list of content-dependent names to determine whether or not the requestor is authorized to allow copying of the data item.

50. (New) The method of claim 1 wherein determining whether or not access to the particular data item is authorized comprises determining whether or not access to the particular data item is not unauthorized.

51. (New) The method of claim 1 wherein the content-based name for the particular data item corresponds to an entry in the database when the content-based name for the particular data item matches one of the plurality of identifiers in the database.

52. (New) The method of claim 1 wherein said database maps each identifier of said plurality of identifiers in said database to information relating to a corresponding data item.

53. (New) A method as recited in claim 1 further comprising:

(d) permitting at least one copy of the particular data item to be distributed to or from at least one computer in the network when it is determined that the particular data item is not unauthorized.

54. (New) The method of claim 1 further comprising:

(d) based at least in part on said determining in (c), causing denial of permission for at least one copy of the particular file to be distributed across the plurality of computers in a network when it is determined that access to the file is not authorized.

55. (New) The method of claim 1 wherein said step (a) of obtaining further comprises:

(a1) by hardware in combination with software, determining said content-based name for said particular data item.

56. (New) The method of claim 55 further comprising:

obtaining a copy of the particular data item, and wherein the step (a1) determines the content-based name using the copy of the particular data item.

57. (New) The method of claim 1 further comprising:

obtaining the database.

58. (New) The method of claim 1 wherein the content-based name for said particular data item is based, at least in part, on a size or length of the particular data item.

59. (New) The method of claim 51 wherein the content-based name for the particular data item corresponds to an entry in the database when the content-based name for the particular data item exactly matches one of the plurality of identifiers in the database.

60. (New) The method of claim 1 wherein the database comprises a table or a list identifying data items which may only be used by licensed users.

61. (New) The method of claim 1 wherein the database comprises a table identifying license information associated with data items, and wherein the table is indexed at least by the identifiers of data items.

62. (New) The method of claim 1 wherein, wherein the database comprises a table containing a plurality of records, and wherein a record of the table records a relationship between a specific data item and users licensed to have access to that specific data item.

63. (New) The method of claim 1, wherein the plurality of identifiers in the database are identifiers of licensed content items.

64. (New) The method of claims 5 wherein the table or list identifies conditions under which certain data items may be used.

65. (New) A method as recited in claim 1 wherein access to said data item comprises one or more of: (a) copying of the data item to or from at least one of a plurality of computers; (b) providing of the data item to at least one of a plurality of computers; (c) reading of the data item; (d) copying of the data item; (e) distribution of the data item; (f) modification of the data item; (g) storage of the data item; (h) opening of the data item; (i) publishing of the data item; (j) writing the data item; (k) moving the data item; and (l) deleting the data item.

66. (NEW) A system operable in a network of computers, the system comprising hardware including at least a processor, and software, in combination with said hardware, to:

(a) obtain a content-based name for a particular data item, the content-based name being based at least in part on a function of at least some of the data

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which comprise the contents of the particular data item, wherein the function comprises a message digest function or a hash function, and wherein two identical data items will have the same content-based name; and to

(b) ascertain whether or not the content-based name for the particular data item corresponds to an entry in a database comprising a plurality of identifiers; and to

(c) determine, based at least in part on whether or not the particular data item corresponds to an entry in a database, whether or not access to the data item is unauthorized.

67. (New) A system operable in a network of computers, the system comprising hardware including at least a processor, and software, in combination with said hardware, to:

control distribution of content from a first computer in said network, in response to a request, the request including at least a content-dependent name of a particular data item, the content-dependent name being based at least in part on a function of at least some of the data comprising the particular data item, wherein the function comprises a message digest function or a hash function, and wherein two identical data items will have the same content-dependent name, and to

based at least in part on said content-dependent name of said particular data item, selectively permit the content to be provided to or from at least one other computer if providing of the content is not determined to be unauthorized or unlicensed.

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68. (New) A device operable in a network of computers, the device comprising hardware including at least a processor, and software, in combination with said hardware:

(a) to obtain a list of content-dependent names, one content-dependent name for each of a plurality of data items, wherein, for each of the plurality of data items, the corresponding content-dependent name for that data item is based at least in part on a function of at least some of the contents of that data item, wherein the function is a message digest function or a hash function, and wherein two identical data items have the same content-dependent name;

(b) to receive, from a requestor, an identifier for a particular data item;

(c) to determine, based at least in part on said identifier for said particular data item, and using said list of content-dependent names, whether the requestor may access the particular data item; and

(d) based at least in part on said determining, if it is determined that requestor may not access the particular data item, to cause access to the requested data item to be denied.

69. (NEW) A system operable in a network of computers, the system comprising hardware including at least a processor, and software, in combination with said hardware:

(a) to receive at a first computer, from a second computer, a request regarding a data item, said request including a content-dependent name for the data item, the content-dependent name being based at least in part on a function of the data in the data item, wherein the data used by the function to determine the content-dependent name comprises at least some of the contents of the data item, wherein the function that was used is a message digest function or a hash function,

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and wherein two identical data items will have the same content-dependent name;
and

- (b) in response to said request:
 - (i) to cause the content-dependent name of the data item to be compared to a plurality of values; and
 - (ii) to determine if access to the data item is authorized or unauthorized based on whether the content-dependent name corresponds to at least one of said plurality of values, and
 - (iii) based on whether it is determined that access to the data item is authorized or unauthorized, to allow the data item to be provided to the second computer if it is not determined that access to the data item is unauthorized.

70. (New) A computer-implemented method operable in a system which includes a network of computers, the system comprising hardware including at least a processor, and software, in combination with said hardware, the method comprising the steps of:

(A) by hardware in combination with software, determining content-based identifier for a particular data item, the content-based identifier for the particular data item being determined based at least in part on a given function of at least some data which comprise the contents of the particular data item, wherein the given function comprises a message digest or a hash function, and wherein two identical data items will have the same content-based identifier;

(B) by hardware in combination with software, determining whether the content-based identifier for the particular data item corresponds to an entry in a database comprising a plurality of content-based identifiers; and

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(C) based at least in part on said determining in step (B), selectively permitting the particular data item to be accessed at one or more computers in the network of computers.

71. (New) A computer-implemented method comprising the steps:

(A) for a particular data item, said particular data item comprising a plurality of segments, for at least some of said plurality of segments, obtaining a corresponding content-dependent segment identifier, each said corresponding content-dependent segment identifier being based, at least in part, on a given function of at least some of the data comprising the corresponding segment, wherein said given function for content-dependent segment identifier of at least one of the segments comprises at least a message digest function or hash function, and wherein two identical segments will have the same content-dependent segment identifier; and

(B) by hardware in combination with software, ascertaining whether or not at least some of said content-dependent segment identifiers have corresponding entries in a database comprising a plurality of content-dependent identifiers; and

(C) based at least in part on said ascertaining in (B), selectively permitting access to the particular data item,

wherein, when the particular data item comprises a file or a portion of a file comprising an audio signal, the content-dependent segment identifier of at least one of the plurality of segments for particular data item is a function of at least some of the data comprising the audio signal; and

wherein, when the particular data item comprises a file or a portion of a file comprising an video signal, the content-dependent segment identifier of at least

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one of the plurality of segments for particular data item is a function of at least some of the data comprising the video signal, and

wherein said selectively permitting access to said particular data item in step (C) comprises one or more of: (a) selectively permitting copying of the data item to or from at least one of a plurality of computers; (b) selectively permitting providing of the data item to at least one of a plurality of computers; (c) selectively permitting reading of the data item; (d) selectively permitting copying of the data item; (e) selectively permitting distribution of the data item; (f) selectively permitting modification of the data item; (g) selectively permitting storage of the data item; (h) selectively permitting opening of the data item; (i) selectively permitting publishing of the data item; (j) selectively permitting writing the data item; (k) selectively permitting moving the data item; and (l) selectively permitting deleting the data item.

REMARKS

Reconsideration and allowance of this application are respectfully requested.

By this Amendment, claims 1-14, 16-22, 24, and 25 have been amended. No claims have been canceled.

The specification has been amended to correct typographical errors. In some paragraphs¹ the word “New” was omitted in front of the term “True File.” This typographical error has been corrected throughout. Support for this correction can be found in the original applications from which this application claims priority, *e.g.*, in U.S. Patent No. 5,978,791 which was incorporated into the present application by reference (see “Related Applications” in ¶0001).

Approval and entry of the specification changes are respectfully requested.

New claims 26-71 have been added.

Independent claims 1, 20, 21, and 24 have been amended to clarify that they are implemented, at least in part, by hardware in combination with software. In this regard, *e.g.*, claim 1, step (b) is indicated as being performed “*by hardware in combination with software.*” (See also the “permitting” step in claim 20, the “determining” step (c) in claim 21, and “determining” step (b)(ii) in claim 24). Support for these amendments can be found throughout the application as filed, including, *e.g.*, ¶¶0043 *et seq.* It should be understood that the claims do not preclude any or all of the other steps also being performed “by hardware in combination with software.”

Independent Claim 1 is also amended to refer to the name as “a content-based name.” This term is used for clarity. Also for clarity, the “data item” is

¹ ¶¶0056, 0084, 0104, 0143, 0336, 0365.

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referred to as the “particular data item.” The claim is also amended recite the “content-based name [of the particular data item] being based at least in part on a function of at least some of the data which comprise the contents of the particular data item, wherein the function comprises a message digest function or a hash function, and wherein two identical data items will have the same name.” Support for this amendment, is found, *e.g.*, in the application as filed, including, *e.g.*, ¶¶0085-88, 0092-93. Claim 1 is also amended to include language from original claim 5. Specifically, claim 1, as amended, recites the step of “by hardware in combination with software, ascertaining whether or not the content-based name for the particular data item corresponds to an entry in a database comprising a plurality of identifiers.”

Independent Claim 20 is also amended to recite that the name is a “content-dependent name”. As with claim 1, for clarity, the data item is referred to as the “particular data item.” The claim is also amended to recite “the content-dependent name being based at least in part on a function of at least some of the data comprising the particular data item, wherein the function comprises a message digest function or a hash function, and wherein two identical data items will have the same content-dependent name...”

Independent Claim 21 is amended for clarity to use the terms “content-dependent names” and “particular data item” and “content-dependent identifier.” The claim is also amended to recite “for each particular data item of the plurality of data items, the corresponding content-dependent name for that particular data item is based at least in part on a function of at least some of the contents of the particular data item, wherein the function comprises a message digest function or a hash function, and wherein two identical data items have the same content-dependent name on the list of content-dependent names.”

Claim 21 is also amended to recite “wherein the data used by the function to determine the name comprises the contents of the data file, wherein the function

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that was used comprises a message digest function or a hash function, and wherein two identical data files will have the same name.”

Dependent claims 5, 6 and 12 are amended to delete redundant language (in view of the current amendments to claim 1). Dependent claim 5 is also amended to recite that the “database comprises a table or list comprising said plurality of identifiers.”

Dependent claim 11 is also amended to delete redundant language (in view of the current amendments to claim 1), and to recite that the name is based on a function of *all* of the data which comprise the contents of the data item. See also new dependent claims 30-32.

Claim 13 is amended to clarify that the content-based name is a *True Name* “of the data particular item.”²

Support for amended claim 14 is found, *e.g.*, at ¶¶0014, and 00333.

New dependent claims 26-29 depend from claims 1, 20, 21, and 24, respectively, and recite that the names are based on functions of *only* the data in the data items.

New dependent claims 33-36 depend from claims 1, 20, 21, and 24, respectively, and recite that “the hardware comprises a processor and memory.” See, *e.g.*, ¶0044.

New dependent claims 37-40 depend from claims 1, 20, 21, and 24, respectively, and recite that “the hardware comprises a computer.” See, *e.g.*, ¶0044.

New *independent* claim 66 is a system claim corresponding to method claim 1.

² The inventors’ defined term “True Name” is defined in the application as filed, *e.g.*, at ¶0053 (“the term[] “True Name” ... refer[s] to the substantially unique data identifier for a particular data item.”; See also ¶0085 *et seq.* describing the calculation of a True Name in a preferred embodiment).

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New *independent* claim 67 is a system claim corresponding to method claim 20.

New *independent* claim 68 is a device claim corresponding to method claim 21.

New *independent* claim 69 is a system claim corresponding to method claim 22.

The citations to the application to show support for the claims are not intended to limit the scope of the claims in any way.

It should be appreciated that the Applicant has not invoked 35 U.S.C. §112, paragraph 6, with respect to any term in any claim of the present application.

No new matter has been added by these amendments.

Claims 1-71 are pending in this application.

THE §103 REJECTIONS

In the Final Office Action of 03/05/2010, the Examiner had finally rejected 1-10 and 13-25 under 35 U.S.C. §103(a) as being unpatentable over Blickenstaff et al, U.S. Patent No. 5,537,585 (hereinafter Blickenstaff) in view of Orita, U.S. Patent No. 5, 163,147 (hereinafter Orita).

The Examiner indicated that he was not persuaded by the Applicant's arguments filed December 11, 2009. Applicant had argued, *inter alia*, that the Orita reference does not teach the limitation "the name being based at least in part on the data which comprise the contents of the data item," and "determining, based at least in part on said name, whether or not access to the data item is authorized."

Applicant incorporates the remarks from the Amendment/Response filed December 11, 2009.

The Examiner relies on Orita's abstract which states:

When a specified file access is requested after the execution of the user program, **whether execution**

of the file access is permitted or not is determined according to access protection information. The access protection information is information having access types **and file contents** defined by the environment profile information.

Orita, Abstract, bold and underline by Examiner in *Final Office Action*.

The Examiner reads the words “file contents” in *Orita*’s abstract to mean that as *Orita* uses the file contents *of the actual file to be accessed*. Applicant respectfully disagrees. The “file contents” that *Orita* refers to in his abstract is the file contents of the “environment profile information” file. Applicant’s interpretation is consistent with the teaching of *Orita*.

Orita “relates to a computer system having a security function, and more particularly to a security system for file access.” *Orita* col. 1, lines 7-9. *Orita* determines whether a user may access a data item based on so-called access protection information. The access protection information includes:

- **Operator Profile (OP) information** (see 12c in Fig. 1 and related description), and
- **Environment Profile (EP) information** (see 12d in Fig. 1 and related description).

When a user wants to run a program in *Orita*, the user must first login (see Fig. 2, steps S1-S3, and related description). If the user’s login credentials are accepted, the system loads the corresponding OP and EP Information from the storage unit 12 to locations 14a and 14b in RAM on the computer 11 (see Fig. 1, reproduced below). Then, if the user tries to access a file from the storage unit, the system verifies that the user has the appropriate access permission (see Fig. 3, steps S12-S13 and col. 4, lines 55, *et seq.*). Thus, in *Orita*’s abstract, when referring to “file contents defined by the environment profile information,” *Orita* is referring to the contents of the file containing the environment profile information.

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INTERVIEW SUMMARY

In the Final Office Action of March 5, 2010, the Examiner invited the undersigned to “call the office” to discuss aspects of the application. In the Final Office Action of March 5, 2010, and in a telephone call to schedule the interview, the Examiner had indicated that he believed that the term “name” in the claims required elaboration. While expressly not agreeing with the Examiner’s position or rejections, Applicant’s representative agreed to propose various limitations.

On March 17, 2010 the undersigned conducted a personal interview with the Examiner for this application.

Applicant again thanks the Examiner for the courtesy extended the applicant and its representative during their various telephone calls and during the interview.

During the personal interview the claims, including the independent claims 1, 20, 21, and 24 were discussed. The undersigned agreed to amend the claims to more specifically define the term “name” when referring to a data item, to be a *function* of the data comprising the data item. The claims have been so amended (as discussed above).

The Examiner also indicated that under current PTO guidelines, in his next action he would likely have to issue a rejection of the claims under 35 USC § 101 as being directed to non-statutory subject matter. While no such rejection was actually made during the interview, the undersigned agreed to also amend the claims to clarify that at least one claim step is performed by hardware. As discussed above, the claims have been so amended.

The undersigned indicated that he would file an RCE (herewith) in order to get the claims fully considered and examined. Although the Examiner agreed with the undersigned’s position and proposed claim amendments during the interview, he advised the undersigned that further search and consideration would be

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conducted, and that approval from a supervisory examiner (SPE) would be required before the application is finally allowed.

In his concluding remarks in the Office Action of 06/15/2009, the Examiner commented on US Patent No. 5,742,807 (hereinafter “the ‘807 patent”). Applicant noted previously that the ‘807 patent is not prior art to the present application. Similarly, in concluding remarks in the Final Office Action of March 5, 2010, the Examiner made of record US Publication No. 2005/0010792 A1, to Carpentier et al. This Carpentier reference is also not prior art to the present application (Carpentier was filed July 19, 2004, claiming priority to a provisional application filed Jan. 23, 1998).

In the personal interview the Examiner acknowledged that the ‘807 patent and the Carpentier reference are not prior art. The Examiner indicated that he had made them of record to show how others had copied Applicant’s invention. The Examiner agreed that such copying was an indication of long-felt need for the invention. The Applicant thanks the Examiner for bringing the Carpentier reference to their attention.

The undersigned’s subsequent review of the Patent Office’s PAIR system shows that the Examiner has rejected claims in the Carpentier application under 102(e) as being anticipated by the published application for the present application, Farber et al, U.S. Publication No. 2008/0066191.

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UPDATE ON RELATED APPLICATIONS

The Examiner's attention has previously been directed to co-pending Patent Applications which are directed to related technical subject matter.

The Examiner is again respectfully requested to consider the related application and the art cited therein during examination of this application.

An IDS is being filed herewith. The Examiner is directed to remarks regarding related applications in that IDS.

CONCLUSION

Applicant respectfully submits that this application is in condition for allowance, and an early action allowing the claims is earnestly solicited.

Should the Examiner believe that a telephone call will resolve any outstanding issues in this case, he is invited to telephone the undersigned at the number provided.

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Davidson Berquist Jackson & Gowdey LLP
4300 Wilson Blvd., 7th Floor,
Arlington Virginia 22203
Main: (703) 894-6400 • FAX: (703) 894-6430

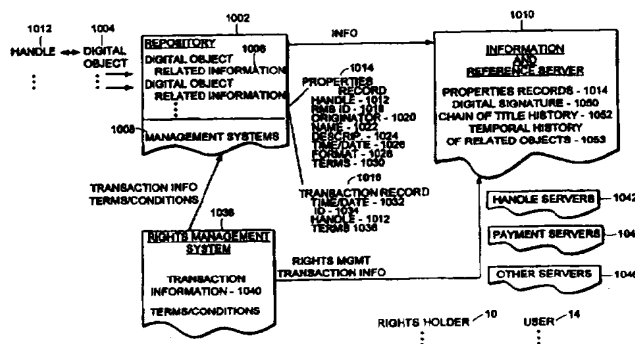
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Registration No.: 37,497



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<p>(21) International Application Number: PCT/US97/07834 (22) International Filing Date: 9 May 1997 (09.05.97) (30) Priority Data: 08/645,491 13 May 1996 (13.05.96) US (71) Applicant: CORPORATION FOR NATIONAL RESEARCH INITIATIVES [US/US]; Suite 100, 1895 Preston White Drive, Reston, VA 22091 (US). (72) Inventors: KAHN, Robert, E.; 909 Lynton Place, McLean, VA 22102 (US). ELY, David, K.; 3015 Miller Heights Road, Oakton, VA 22124 (US). (74) Agent: FEIGENBAUM, David, L.; Fish & Richardson, P.C., 225 Franklin Street, Boston, MA 02110-2804 (US).</p>		<p>(81) Designated States: AU, CA, CN, JP, MX, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p>

(54) Title: IDENTIFYING, MANAGING, ACCESSING, AND TRACKING DIGITAL OBJECTS AND ASSOCIATED RIGHTS AND PAYMENTS



(57) Abstract

A method of managing digital objects (1004) in a network is presented. The objects are stored at locations (1002) accessible in the network using a storage technique which renders the digital objects secure against unauthorized access. Pointer information (1016) which associates each digital object identifier with a pointer indicating the location of the stored digital object is also stored in the network. For each digital object validation information (1050) is stored, separately from the digital object, and is sufficient to permit a determination whether a purported instance of a digital object is identical to the original. Other aspects include providing multiple servers (1042) each of which accepts identifiers of a subset of the digital objects and returns corresponding pointers to the locations of the digital objects in the network; registering rights in digital objects by submitting an application (62) including the validation information and the unique identifier of a digital object; enabling holders of rights in digital objects to control terms and conditions under which they are accessed by users in a network; maintaining a record of information concerning digital objects stored on a network; and tracking events (1052, 1053) in the system.

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06154/004WO1

IDENTIFYING, MANAGING, ACCESSING, AND TRACKING DIGITAL
OBJECTS AND ASSOCIATED RIGHTS AND PAYMENTS

Background

5 This is a continuation-in-part of United States
Patent Application Serial Number 08/142,161, filed
October 22, 1993.

 This invention relates to digital objects and
associated rights and payments.

10 By a "digital object" we broadly mean any set of
sequences of bits or digits and an associated unique
identifier which we call a "handle". A digital object
may incorporate information or material in which rights
(e.g., copyright rights) or other interests are or may be
15 claimed. There may also be rights associated with the
digital object itself. Thus digital objects may include
conventional digital representations of works (books,
papers, images, sounds, software), and more broadly any
digital material which is capable of producing desired
20 manifestations for a computer user. Thus, a digital
object could include programs and data which, though not
directly a representation of the text of a work, enable
the delivery over a network and the subsequent
reproduction on a computer screen of selected portions of
25 the text of the work. By the notion of rights which are
or may be claimed in a digital object, we mean rights
which exist under statute (e.g., copyright, patent, trade
secret, trademark), or as a result of private action
(e.g., via secrecy, cooperative ventures, or
30 negotiation).

 Rights are normally protected under the law by
mechanisms that are paper-based. Patent and trademark
applications are prosecuted by exchanges of paper with
the Patent and Trademark Office. Trade secret rights are
35 often protected by appropriate legends on paper, and by

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physically guarding paper copies against disclosure. Registration of claims in copyright is largely based on a paper system. Registration systems generally involve providing physical copies (sometimes voluminous) to the registering authority of the object to be registered.

5 Holders of rights may get value from those rights by allowing others to copy, use, or perform the object covered by the rights in exchange for consideration (e.g., a photographer may sell copies of his
10 photographs). In some situations there may no need for negotiation of the terms, which may be simple and well understood. The working out of compensation may be done automatically by private clearing house operations, such as the Copyright Clearance Center (as to photocopying) or
15 ASCAP and BMI (in the music field).

In other situations the rights holders may derive value by granting to others exclusive rights to disseminate the object in exchange for a royalty (e.g., a book author grants a publisher the North American
20 paperback distribution rights). Exclusive rights are typically subject to direct negotiation.

It is common to provide for central registration of ownership and other exclusive rights so that others may know the timing and terms of those rights.

25 Making digital objects available on networks (e.g., Internet), gives rise to at least four specific activities of concern. The first is the ease of movement of digital objects already contained in a computer network environment allowing the creation of multiple
30 copies in multiple machines in fractions of a second. The second is the importation of external information, such as print material or isolated CD-ROM based material, which must first be scanned or read into the system before it can be used. The third is export of internal
35 network based information to paper using digital printers

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or facsimile machines or copying to separable media such as tape or DAT for external transport to others. The fourth is that digital objects may be easily manipulated on a computer to produce derivative works. The
5 derivative works can also be easily moved about in a computer network environment and be subject to further manipulation by other parties. Parallel and concurrent manipulation can generate an exponential proliferation of derivative works.

10 Several technologies are known for handling privacy and authentication in a digital network environment, including public key cryptography, digital signatures, privacy enhanced mail, and notarization.

Summary of the Invention

15 In general, in one aspect, the invention features a method of managing digital objects in a network, the objects are stored at locations accessible in the network using a storage technique which renders the digital objects secure against unauthorized access. Pointer
20 information which associates each digital object identifier with a pointer indicating the location of the stored digital object is also stored in the network. For each digital object validation information is stored, separately from the digital object, and is sufficient to
25 permit a determination whether a purported instance of a digital object is identical to the original. In examples of the invention, an authorized user may have access to the validation information, using the digital object identifier, to determine whether a purported instance of
30 a digital object is identical to the original. The validation information comprises a digital signature over the digital object.

Another general aspect of the invention concerns managing reference information about digital objects in a
35 network. The reference information is stored for each of

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the digital objects. Validation information is also stored and is substantially smaller in size than the corresponding digital object. In examples of the invention, an authorized user may have access to the
5 reference information using the unique identifier. The reference information includes information concerning at least one of the following: registration of rights in the digital object including performance of the object; accesses to and uses of digital object; the terms and
10 conditions for use of digital objects; the ownership and transfer of rights to disseminate digital objects; links between different digital objects.

In another general aspect of the invention, which concerns the storing of the digital objects in a network,
15 the verification information is stored separately from the digital object. In examples of this aspect of the invention, the pointer to the object (versus identifier information for the object) is stored in multiple servers on the network. The identifiers are generated in a
20 manner to distribute the pointer information with the unique identifier information) relatively evenly among the servers, using a hashing algorithm.

Another general aspect of the invention concerns enabling users of a network to access or perform digital
25 objects stored in the network. There are multiple pointer servers each of which accepts identifiers of a subset of the digital objects and returns corresponding pointers to the locations of the digital objects in the network. A directory server accepts identifiers of any
30 of the digital objects and maintains and returns a table containing the locations of the pointer servers which accept those identifiers.

Another general aspect of the invention concerns applying for registration of rights in digital objects by
35 submitting to a registering authority an application for

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registration of rights including the validation information and the unique identifier of a digital object and its properties.

Another general aspect of the invention concerns enabling holders of rights in digital objects to control terms and conditions under which they are accessed or performed by users in a network. Information is stored about terms and conditions for access to and performance of each digital object. The information is made available to a user in connection with a request for access to a digital object. The user is enabled to indicate assent to the terms and conditions. Access is permitted to the user only upon the user indicating assent to the terms and conditions.

Another general aspect of the invention concerns enabling holders of rights in digital objects to control terms and conditions under which rights in the digital objects may be granted to others. Terms and conditions for the granting of rights is stored in the network. The terms and conditions are made available to potential rights holders upon request via the network. The potential rights holder and the current rights holder interact via the network to reach agreement on terms and conditions for grant of dissemination rights. Information identifying grants of such rights for digital objects on the network are stored in a recordation server on the network. This will generally be part of the reference service.

Another general aspect of the invention concerns maintaining a record of information concerning digital objects stored on a network. The digital objects are stored on the network in a manner that restricts unauthorized access to and transactions associated with the digital objects. A reference service is provided on the network, separate from the storage of the digital

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objects, for recording information about accesses to and transactions associated with the digital objects.

Information about accesses to and transactions associated with the digital objects is recorded in the reference
5 service. Access to the records of the reference service is permitted to authorized users.

Another general aspect of the invention relates to managing registration of claims to rights in digital objects. Copies of the digital objects are stored in a
10 repository in a manner that enables only authorized accesses to the digital objects and permits verification that the stored digital objects have not been subjected to unauthorized alteration. At a registrar which is accessible on the network at a different network address
15 from the repository, registration services are provided including receipt via the network of registration requests and delivery via the network of registration certifications. The objects are accessed at the repository via the network for use in providing the
20 registration services.

Examples of the invention include the following features. Owners of rights in digital objects may deposit copies of the digital objects in the repository, via the network. There may be multiple repositories. A
25 set of servers, accessible on the network, are provided for the purpose of generating a unique handle for each digital object. The handle for a digital object is unique both across the network and over time. A service, accessible on the network, is provided for locating the
30 handle associated with a digital object. The handle is used to obtain a pointer to the network location of an accessible copy (by "copy" we intend a broader concept than the conventional notion of copy; see other sections of this application for explanation) of the digital
35 object. The handle is used to obtain a pointer to the

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network location of information concerning obtaining authorization to use the digital object. The services are provided at multiple different locations on the network. The handles comprise unique character strings
5 associated with the servers which generated them. A handle server, accessible on the network, provides the pointer in response to presentation of a handle. Multiple servers provide the service, each serving a portion of the handle space. Multiple handle generation
10 servers may generate handles independently. Information concerning simple terms and conditions is stored in the repository. Information concerning non-simple terms is held in a rights management system (it may also contain the simple terms and conditions). Each of the handles is
15 used to obtain a pointer to a rights management system in which information concerning non-simple terms is held. Hash values are computed on the handles and the hash values are distributed among multiple handle servers, each handle server having a table which associates
20 handles with pointers.

Another general aspect of the invention features a method for providing network based regulation of claims in rights in digital objects, and, in connection with actions (e.g., registration of rights or obtaining copies
25 for consideration) pertaining to regulation of claims in rights in the digital objects, using handles to obtain authorized access to the digital objects in the repository. actions include registration of claims in the rights.

30 Another general aspect of the invention features a network-based method for managing compensation for access to digital objects and transfer of rights in digital objects. Information is stored on the network identifying the ownership of rights in digital objects.
35 At a rights management system available on the network,

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requests for rights in digital objects are received. In response to the requests for rights (e.g., exclusive rights), and after successful negotiation of rights transfers, requests are issued from the rights management system to the recordation system via the network, to record transfers of rights in the digital objects.

Examples of the invention include the following features. The transfer of rights is recorded in the recordation system in a manner which is secure against alteration. The request for transfer of rights typically occurs after the owner is compensated using a network based method of compensation or other method, or a commitment has been obtained to compensate the owner of the rights using the network-based compensation method or other method.

Among the advantages of the invention are the following.

Any kind of digital object may be dealt with. Owners of digital objects may deposit them in a secure manner that both restricts access and allows for later verification that the deposit has not been altered. Detailed records of the history of deposits and of transactions related to the objects (e.g., transfers of rights) may be kept in a protected location in the system, while access to those records may be allowed to any authorized party on the network. The records may include information about the history of revisions and derivative versions of objects, and may link objects based on other relationships among them.

Thus, in combination the information and reference server (e.g., the registrar) and the repositories provide a unique capability, applicable to any digital object, to provide for protected storage in electronic storage facilities and, in a separate facility, secure maintenance of validation information needed to assure

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the unaltered nature of the stored object and historical information about the object. In this way, it is not necessary to store the objects at the same location as the validation information and any authorized person on the network (e.g., a court, or a government employee, or the rights holder, or a user) may have access to the validation and historical information and, if authorized, the object itself. When applied broadly to a large number and variety of rights holders and users, the system will produce a digital object infrastructure of enormous value to the conduct of business.

The digital signature, privacy enhanced messaging, and other protection mechanisms assure the integrity of the system.

The present manual paper system for mediating rights in the use of and dissemination of digital objects is replaced by a network-based system that operates rapidly, accurately, and efficiently, and will produce a freer, higher velocity market in such rights, thus greatly enhancing the value of the rights.

Corporations and private institutions may apply the invention in a variety of contexts.

The handles used to uniquely identify digital objects are designed to be extensible and expandable to accommodate virtually any number of objects over many years. The hashing mechanism provides an efficient and reliable implementation.

Other advantages and features will become apparent from the following description and from the claims.

Description

Figure 1 is a block diagram of a system for managing digital objects.

Figure 2 is a block diagram of an example of a system for registration of rights, recordation of transfers of rights, and rights management.

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Figure 3 is a block diagram of digital signing and verification processes.

Figure 4 is a block diagram of a public key distribution arrangement.

5 Figures 5 and 6 are diagrams of handles.

Figure 7 is a diagram of hash code space.

Figure 8 is a flow chart of handle processing.

Figure 9 is a flow chart of a process for applying for rights registration.

10 Figure 10 is a block diagram of portions of the system.

Figures 11 through 13 are flow charts of a registration process.

15 Figure 14 is a block diagram of portions of the system.

Figures 15 through 17 are flow charts of a process of depositing an object in a repository.

Figure 18 is a block diagram of portions of the system.

20 Figures 19 through 22 are flow charts of a registration application process.

Figure 23 is a block diagram of portions of the system.

25 Figure 24 is a flow chart of a process of setting up an account.

Figures 25, 26, and 27 are flow charts of processes of retrieving an object.

Figure 28 is a schematic diagram of repositories and naming authorities.

30 Figure 29 is a diagram of a composite digital object.

Figure 30 is a diagram of a repository and repository access protocol.

35 Figure 31 is a diagram of a service request program of a repository access protocol.

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Figure 32 is a diagram of a handle.

Figure 33 is a diagram of portions of a handle system.

Figure 34 is a diagram of a handle server system.

5 Preliminarily we define several terms and concepts which are used in the following discussion (see Figure 1).

Formally, a digital object is an instance of an abstract data type that has two components, data and
10 key-metadata. The data is typed as described below. The key-metadata includes a handle, i.e., an identifier globally unique to the digital object; it may also include other metadata, to be specified. Possible primitive and composite data types for digital object
15 data are discussed below.

A "repository" 1002 is a digital storage system into which digital objects 1004 may be placed and retained for possible subsequent retrieval. The repository may contain other related information 1006 as
20 well as management systems 1008. Where appropriate, such information may be provided to an "information and reference server" 1010. The repository has mechanisms for adding new digital objects to its collection (depositing) and for making them available (accessing),
25 using, at a minimum, a so-called repository access protocol. The repository may contain other related information, services and management systems. The result of retrieving a digital object from a repository may be a performance of the digital object (e.g., execution of a
30 program) or the digital object itself (e.g., the program). This is important in the case of digital objects which are only intended to be performed by users (e.g., a video game) rather than making the object itself available. A performance of a digital object may be

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stored as a new digital object and there may be separate terms and conditions associated with it.

Repositories 1102, 1104, 1106 (Figure 28) have official, unique names 1108, 1110, 1112, assigned or
5 approved to assure uniqueness by a global naming authority 1114. In general, the global naming authority will assign a name to a local naming authority 1116, 1118, 1120. The local naming authority may use this name as the name of a repository. In addition, it may extend
10 this name to create new names by suffixing the name with a ".", followed by a new (relatively) unique name component. Each such name represents a naming authority and potential associated repository. (I.e., in general, repositories will have unique names of the form "X.Y.Z".)

15 Note that a repository name is not necessarily the name of a particular host. For example, repository 1107 may correspond to a set of hosts at different physical locations.

A "stored digital object" 1122 is a digital object
20 stored in a repository. In addition, handles 1127 are expected to be made known to a system 1128 of "handle servers", as described below. Such a handle is a "registered handle". A "registered digital object" 1124 is a stored digital object whose handle has been
25 registered. (Note that a handle cannot be registered until its corresponding digital object is stored)
Repositories provide users access to stored objects under terms and conditions that may be set by the depositor and/or a given repository.

30 Registered digital objects are entities of significance to the infrastructure, since they are stored in a repository and made known via the registration of their handles. Intermediate entities, such as stored digital objects, are defined because they may arise in
35 implementations of repositories that provide access to

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registered digital objects. However, their existence is not strictly necessary. For example, a repository may offer a service in which it deposits a digital object and registers the handle simultaneously, therefore creating a registered digital object without creating a prior stored, but not registered, digital object. (It is possible, of course, to create other useful classes of digital objects. For example, we may define a proposed digital object as a digital object whose handle field contains a string that has not yet been registered and whose uniqueness may not yet be known.)

Concatenated and composite digital objects

Digital objects are "typed". Thus one can tell in a concatenated sequence of digital objects what kind of digital object is present (e.g., the "object itself" or a "performance of the object") and where each digital object starts and ends. One simple way to accomplish this is to include a type field as the first part of the sequence of binary digits which contains the necessary information. It could also be externally maintained (e.g., in a properties record 1014 in Figure 1, described below). Data types assumed to be in the handles system include bit-sequence, digital-object, and handle, and also set-of-bit-sequences, set-of-digital-objects and set-of-handles. Other data types can be defined and made available to the handles system via the type construction operators set-of and compose; these types are then registered in a global type registry.

In contrast, one can create subtypes of digital objects by introducing new fields of metadata; these may be arranged hierarchically. For example, one might create a subtype of digital object called computer-science-technical-report which has metadata for author, institution, series, and so forth.

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As seen in Figure 29, a digital object may contain other digital objects in the sequence of binary digits following its handle. A user will be able to identify these contained objects from the type fields 1134 of those digital objects 1130 contained therein. We shall informally refer to digital objects whose data is a set, one of whose elements is of type digital-object, as "composite digital objects" 1132. A digital object that is not composite is said to be elemental. (Note that this definition explicitly excludes the application of the adjective composite to a digital object whose data is another digital object, i.e., whose data is of type digital-object, as distinguished from a singleton set of this type. Nothing precludes the existence of such objects, however.)

The terms and conditions of a composite object may implicitly or explicitly be unioned with those of its constituent objects to arrive at the terms and conditions for those constituent objects. Terms and conditions may be explicitly imposed only on the composite object, in which case they would apply to each constituent object; or each constituent may have its own separate terms and conditions in addition. (Of course, creating composite digital objects may be subject to copyright and any other legal restrictions pertaining to its constituent objects.)

Properties record and transaction record

A digital object may have associated with it, in the repository or elsewhere, as part of the related information 1006, a "properties record" 1014 which is a set of database entries that describe properties of the digital object.

A stored digital object also may have associated with it, in the repository or elsewhere, an associated "transaction record" 1016 which records transactions

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involving the digital object. The transaction record may contain entries such as the time and date of deposit of the object 1032, the time and date of each request for retrieval of the object, the identity of the requesting
5 party 1034, the handle 1012 and service request for the object, and the applicable terms and conditions 1036 including amount and method of payment. Transaction records will only be made available to authorized parties. Repositories are not required to have
10 transaction records persist for any period of time and it may store transaction records at various times and places as deemed necessary subject to administrative controls.

The properties record comprises all metadata for a digital object, including its key-metadata, but also,
15 other metadata the repository may maintain for that digital object. Notionally, the key-metadata component is a subset of metadata which is invariant for a digital object over repositories. No restriction is implied on how much of the metadata should be included in the
20 key-metadata, other than requiring that it include a mandatory handle. Possible examples of repository-dependent metadata are the general terms and conditions for access and usage of the digital object, and the date and time of deposit.

25 The properties record may contain entries such as the identity of a rights management system 1018 (i.e., the system that has control over transfers of and compensation for rights in that object), the handle 1012 for that object, the originator of the object 1020, the
30 name of the object (if any) 1022, a description of any work or other information or material incorporated in the object 1024, the time and date of deposit 1026, format information 1028, and stated terms and conditions for access and usage of the object 1030. The terms and
35 conditions in the properties record may allow the user to

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select which type of action to allow (e.g., retrieve object or perform object). The user may be allowed to negotiate type of action with the RMS. The user also may be given no choice of options. In many retrieval cases, 5 the user will not know if an option exists.

The properties record, the transaction record, and the digital object all are normally accessible using the handle.

A digital object's data may incorporate 10 information or material in which copyright, design patent or other rights or interests are claimed. There may also be rights associated with the digital object itself. An author may have submitted a digital object for purposes of registering a claim to copyright in a work that may be 15 incorporated in the object. Since the copyright pertains to the underlying work fixed in the form of the particular submitted representation, the rights would normally pertain to all representations of the work, including, but not limited to, those representations of 20 the work that are contained in other digital objects.

The entities discussed thus far give users a number of means to include digital objects that contain or may be interpreted to manifest the same or similar information or material. As an example, a literary work 25 may be fixed in a number of different formats, e.g., LaTeX, PostScript and GIF page images. Each fixation may correspond to a distinct (elemental) digital object, each with its own unique handle, and other metadata). A composite digital object may then be created whose data 30 is the set of these digital objects. Similarly, one could create a composite digital object whose constituent objects were the fixations of the literary works of Shakespeare in PostScript. The handle of this composite digital object, in effect, names the PostScript 35 collection of Shakespeare's literary works.

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Note that it is possible to construct objects with similar effects without using composite digital objects. For example, the single digital object intended to correspond to a work could have data of type

5 set-of-bit-sequences, rather than of type set-of-digital-objects, and contain each of the forms of fixation therein. In this case, digital objects may not exist corresponding to the individual fixations. Another possibility is to have a digital object whose data is of

10 type set-of-handles. In this case, the handles would name the individual fixations (which may not even be available from the same repository). Such a digital object may contain other data fields that further describe (or annotate) the handles. Yet another

15 possibility is to create a markup language which admits handles, plus other conventions for expressing how they relate to each other (for example, whether the individual handles are meant to be interpreted as different fixations of the same work, or a list of bibliographic

20 citations, etc.) A digital object whose data comprise sentences in this markup language could serve to represent the same entities as do composite digital objects.

Meta-object; mutability

25 We use the informal term "meta-object" to refer to a digital object whose primary purpose is to provide references to other digital objects. Both digital objects whose data are of type set-of-handles and digital objects in a markup language that admits handles, would

30 be instances of meta-objects.

A digital object may be mutable in that it may be changed after it is placed in a repository. Although none of the key-metadata may be changed, nor may any known digital object that it contains be changed (unless

35 the original digital object is also changed), most other

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changes are permissible. Minor changes might be made to correct a misspelling or other such error; changes to the title of a mutable digital object may be permissible. A mutable composite digital object could be modified to add
5 the representation of an underlying work in a new format. Mutability would also be a useful way to allow digital objects that are designed to change with time or are dynamically computed.

A digital object that cannot be changed is said to
10 be "immutable". If an object is immutable, then, once it is placed in a repository, the result of all subsequent requests to that repository that are functionally dependent on the data of the object must be identical. (However, it may be possible to remove an immutable
15 object from a repository, or deny access to it at different points in time.) That a digital object is immutable may be reflected in its key-metadata. It is also possible that a given repository may preclude changing a stored object by an indication in its
20 non-key-metadata.

Once set, the mutability or immutability of a digital object cannot itself be changed. Users who wish to achieve a comparable effect would have to create a new digital object with similar data and altered metadata.
25 The original digital object may then be withdrawn or not, as desired.

Rights management system

The "rights management system" 1038 is a system used to negotiate access rights and other rights not
30 otherwise specified in the properties record. It retains information about transactions, and communicates information about approved transactions and associated terms and conditions to the repository. Where authorized, it also informs the information and reference

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server about transactions involving rights management for recordation purposes.

The information and reference server 1010 receives information from the repository and the rights management
5 system. It retains a copy of the properties record for each digital object, a digital signature or other "fingerprint" of the digital object (the digital signature and other fingerprint is typically considerably smaller than the object itself) suitable for verification
10 purposes, and a temporal history list of related objects. In retains a history of chain of title 1052 to digital objects. The information and reference server is intended to be used for browsing, verification purposes, and to alert users to changes in the system. In some
15 implementations it can be used as a registration and recordation server for copyright and other purposes. The server may be part of a governmental department, or of a private service operation. The information and reference server typically would not retain complete digital
20 objects for storage and retrieval purposes.

The network would also be accessible to a wide variety of rights holders 10 (e.g., authors, owners, holders of exclusive rights). The rights holders may have access, when authorized, to the information and
25 reference server, the repositories and the rights management system. The information and reference server, the repositories, and the rights management system are also potentially accessible by network users 14, who may wish to obtain, use, modify, transmit, perform, and
30 enhance selected digital objects, or the results of operations performed by or on digital objects. The medium of the network (e.g., the cables, airwaves, public switched telephone network) is not shown in the figure; but the network medium could be organized as a single

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local area network, a wide area network, or a broader network structure (e.g., the Internet).

Originator

An "originator" 1140 is an entity that authorizes
5 or validates a set of digital objects; it is responsible
for each such digital object including making it
available in the handles system 1142 and defining terms
and conditions for its use. Every digital object has an
originator, which may be an individual or an
10 organization. Originators may deposit and access the
digital objects they authorize or validate and may
authorize others to do so (this also includes the right
to withdraw or modify the objects), subject to the
procedures established by individual repositories.
15 Naming authorities have the right to insert handle
entries for handles they generate into the handle server
system and to authorize others to do so. An originator
and/or a naming authority may also delegate this
authorization ability to others (typically this would be
20 to one or more repositories) Such delegation includes at
least the right to authorize the further deposit of
digital objects on behalf of the originator and insertion
of designated groups of handles on behalf of the naming
authority. Repositories may establish additional
25 requirements of various kinds.

Repository of record

The initial repository used to deposit a
registered digital object is designated the "repository
of record" (ROR). The ROR is responsible for authorizing
30 additional instances of the digital object at other
repositories, and for making changes or withdrawals of
such additional instances of the digital objects, usually
upon the direction of the originator. Once designated,
the ROR may subsequently be changed by an authorized

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party to another repository, but the method for achieving this is not specified here.

Each digital object has a "handle", a concise unique identifier for a digital object used for storage and retrieval operations and other repository functions.

The overall system also includes a handle management system 1042 (Figure 1; also seen on Figure 2) comprising multiple servers which provide handle server directory services, handle-to-pointer translation services (called "handle servers"), and handle generation services; payment servers 1044 which provide payment authorization services; and a wide variety of other possible servers 1046 including those which would provide intermediary services between rights holders and users, on one hand, and other servers on the other hand. For example a server might provide a service of receiving a conventional bibliographic citation to a journal article and communicating with an appropriate handle server to identify the location of the article on the network. That service and others could be provided as commercial services. It should also be clear that services can be provided on a widely distributed basis by multiple similar servers at different locations on the network, or by single centralized servers. Furthermore, not all of the digital objects which may exist on the network need be covered by the servers of Figure 1. Only when rights holders choose to subject their objects to the system would the services need to be provided.

There is no requirement that a digital object be stored in a repository in any particular manner. Conceptually, the description of a digital object is strictly a logical one and is not intended to describe any particular implementation. In particular, it is possible that, in response to a request to access a particular digital object, a server runs a program that

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computes the digital object on the fly. It is possible for multiple digital objects to be embedded in a program (e.g., a data base manager or knowledge based system) that emits them upon request. The program may itself be
5 a digital object. Thus, accessing and depositing are virtual processes, and may or may not involve the actual depositing and retrieval of actual objects per se, although such actual storage and retrieval is likely to be prevalent.

10 Repository Access Protocol (RAP)

A "simple repository access protocol" (RAP) is supported by each repository and discussed below. The RAP may be merely a subset of a larger interface protocol used by repositories, provided that the functions or
15 operation of the RAP not be affected by any implemented supersets of the protocol. In particular, as seen in Figure 30, the RAP 1136 allows for accessing a stored digital object or its metadata by specifying its handle, a service request type, and additional parameters. If
20 this request is complied with, the output of the service request is termed a "dissemination" 1138. A dissemination is the result of an access service request, along with additional data affixed to it.

Access to a digital object (ACCESS_DO)

25 Access to a digital object will generally invoke a service program 1150 that performs stated operations on the digital object or its metadata depending on the parameters supplied with the service request. Defined service requests include metadata 1152, key-metadata 1154
30 and digital object 1156; the first requests only the metadata, the second only the key-metadata, and the latter, the entire digital object (i.e., the key-metadata and the data). Other systems-level services 1158 may be defined. Possible examples of such additional services
35 might be encrypt, i.e., return the digital object in some

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encrypted form, or compress, i.e. store a fewer set of bits than supplied with the property that the original bits can be regenerated, perhaps exactly.

In addition, it is possible to have
5 data-type-dependent service requests 1157. Possible examples of such data-type-dependent services requests might be execute (for digital objects a portion or all of whose data component is of type program), or subpart (which requests only a component of the data or metadata
10 of the digital object, further specified by some parameter).

When a digital object is accessed via ACCESS_DO, the recipient receives a dissemination, that is, the result of the service request, along with information such as
15 the key-metadata of the digital object, the identity of the repository, the service request that produced the result, the method of communication (if appropriate) and a transaction string corresponding to an entry in the transaction record. The transaction string is unique to
20 the repository. In addition, the dissemination may contain an appropriately authenticated version of some portion of the properties record for that object, including the specific terms and conditions that apply to this use of the digital object and the materials
25 contained therein.

As noted above, depending on the nature of the ACCESS_DO service request, the dissemination may not be stored as a digital object per se. It might instead include data that is not contained in any registered
30 digital object, such as a portion of a digital object's data, the digital object data in a compressed format, or the result of executing the data of the digital object. In all cases, however, the key-metadata (including, of course, the handle) of the digital object is included.

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From a copyright perspective, if the service request produced a dissemination that was derived from a particular digital object, the digital object may be contained in the dissemination, in the sense that the dissemination may be encumbered by the rights associated with the digital object. For example, if the data of a stored digital object represents an episode of a television program, and the dissemination contains the data corresponding only to the first two minutes of this television program, the dissemination may be said to contain the digital object in a legal sense, even if it does not properly contain all of its data.

Deposit of a digital object (DEPOSIT_DO)

Several forms of DEPOSIT_DO are possible. For example, one form may take data, a handle, and perhaps other metadata as arguments, and produce a stored digital object and properties record from these arguments. Another possible form may take a digital object as argument, perhaps with additional metadata, and simply deposit it. Yet another form may take only data and certain non-key-metadata, and automatically request a handle from a handle server, and then simultaneously store the object and register the handle.

The DEPOSIT_DO command may be used to replicate an existing digital object at additional repositories. A DEPOSIT_DO command may also be used to directly modify an existing mutable digital object. Alternatively, a modified version of an existing digital object may be stored as a new digital object rather than by modifying the existing one.

Access to reference services (ACCESS_REF)

This command provides a uniform and understood way to identify alternate means of accessing a specified repository and/or information about objects in that repository. Two possible responses are (i) No

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information, and (ii) a list of servers, protocol-name
pairs, with the interpretation that each server, speaking
the named protocol, will provide information about the
contents of the repository. (That is, we provide a means
5 of allowing a repository to have its contents indexed,
queried, or otherwise described. It is possible, for
example, that a repository will be its own provider of
information about its contents, and list only itself, and
some protocol, as the information provider about its
10 contents. However, it is not required that any
accounting of the contents of a repository be available,
or that it be available from any one service. This is
because we do not require that repositories per se
correspond to coherent collections, which may be
15 distributed across independently operated repositories.)

The RAP has been kept simple; more complex
transactions may be assumed to be handled by other
protocols, or by subsequent extensions of the RAP. In
the first case, a primary use of the RAP for more
20 sophisticated repositories is to have it present the
other protocols that it supports (e.g., Z39.50, SQL3,
ZQL, Dienst) as alternative access methods.

It may be desirable to extend the RAP in any
number of ways, for example, to explicitly include, for
25 example, a payment mechanism or a negotiation mechanism
or a more sophisticated interactive model-based
interaction mechanism.

Tools for administration of handles

Administrative data is stored in each handle
30 record as a special data type. Access to this data is
governed by access permissions specified for each handle
separately.

Administrative tools are provided for creation of
naming authorities; for creating, modifying, and deleting

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handles; for changing access permissions by individual or by group.

Two sets of tools are currently provided. The first uses electronic mail. The only security is to check the "from" field in the e-mail header. The second uses Mosaic forms. Security is by ID and password. It is intended to use public key encryption.

The handle system is based on the UDP protocol. This enables a large number of transactions to be handled efficiently, but some security firewalls reject UDP packets. Therefore, the choice of UDP or TCP is provided as alternatives for the local handle server, caching server, and client library, but not for the global handle server.

15 Overview of an Example System

In what follows, we provide examples of operations which may be conducted with assistance of the servers and services of the kind shown in Figure 1. The operations include registration of rights, recordation of transfers of rights, deposit of objects in repositories, generation and use of handles, arranging compensation for use of objects and for licensing and transfer of rights (e.g., exclusive rights) in objects (under simple or non-simple terms), use of digital signature and other protective mechanisms to insure the integrity of the transactions within the system, management of rights, and obtaining objects from repositories.

As seen in Figure 2, an example system 31 includes a digital object management system 32 which includes hardware and software to create and store digital objects and manage rights to the objects. In the system, a user agent (UA) 34 provides a user interface for interactions with other elements of the system. The UA is in the form of software running on a workstation. The UA may be used to initiate storage of an object within a repository 36

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by passing the object to the repository or by transmitting information which the repository can use to retrieve the document. The UA also interacts with the repository to initiate a rights registration application
5 process.

The UA also interacts with a rights management system (RMS) 38 to initiate recordation of transfers of rights. The UA interacts with the registration system 40 directly (or indirectly through the repository) to
10 initiate the rights registration application process and with the public access registration database 41 to allow users to browse and search for information about registered rights. System 40 and database 41 are part of
15 a rights registrar facility (and serve as an example of the information and reference server of Figure 1).

Rights holders may prepare digital objects for entry into the system using a workstation and file server 42 which transfers objects in any of several well known formats (e.g., ASCII or Group IV facsimile) to the
20 workstation hosting the UA for rights registration application processing.

The RMS 38 provides information about terms and conditions for use of digital objects and enters into negotiations with users for rights. The RMS interfaces
25 with the information and reference server to obtain relevant reference information. The RMS also controls conditions for access to objects stored in repositories. The RMS may delegate to the repositories the
responsibility to handle simple terms and conditions.
30 The repository 36 holds copies of digital objects in a secure and verifiable manner and controls access to the objects. The repository also sends copies of digital objects to other systems when instructed to do so by an RMS.

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In the rights registrar facility 43, the public access registration database 41 will provide access to information about registered rights and provides a read-only interface to a cataloging system 44. The registration system 40 holds digitally submitted rights registration applications during application processing. The application information is submitted to a tracking system 46 for tracking purposes (e.g., for tracking examination or status) when the digitally submitted application is received. The recordation system 48 stores and provides information about transfers of rights (and other information pertaining to rights and interests. The recordation and registration systems in this example form part of a more general information and reference service.

The cataloging system 46 stores information about registered rights and provides the basis for public (network) access to registration information.

A registrar workstation 50 allows a registrar user to view and print rights registration applications and accompanying documents and recordation information and accompanying documents. The workstation interacts with the registration system to obtain registration application information, with the rights management systems and repositories to obtain digital objects whose rights are being registered, and with the recordation system to obtain recordation information and associated documents.

The handle management systems 54 are used to find the location of digital objects and the locations of each object's associated RMS. A handle for an object may be associated with zero or more object pointers. Object pointers contain location information for locating digital objects and/or associated RMSs. Each object may

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have an associated RMS which manages rights in the object on behalf of the rights holders.

Handle generators 56 in the handle management systems 54 create the globally unique handles.

5 Handle servers 58 process handle query requests. If the handle which is the subject of the query is found by a handle server, the object pointers associated with the handle are returned to the requesting client. A handle server accepts a handle as input and returns a
10 list of pointers associated with the handle, where each pointer = { domain name of storage system (repository), domain name of RMS }. The domain name of the RMS may be null, e.g., if there are no terms and conditions stored in the RMS. The domain name of the storage system may be
15 null if the rights stored in the RMS do not include obtaining a copy of the object, or if the rights apply to a "physical" object.

The handle server directory 59 allows users to find the correct handle server for processing a given
20 handle. Users which obtain handles from servers associate them with digital objects. The handle server directory 59 distributes handles to handle servers based upon a hash of handles. The handle server directory provides a list of domain names of handle servers and
25 identifies the set of hash values of handles which each of the handle servers can map to pointers. Each country has its own collection of handle servers and handle server directories.

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Public Key and Digital Signature Technology

There are several security issues that the system must solve. The registration system must be able to verify the identity of the rights registration applicant. 5 This is required since the applicant will charge the registration to an account, and it is also required for legal reasons.

When an object is transmitted to either the registration system or the repository, the recipient 10 system must be able to determine that the object was not altered in any way. When an object is stored on a repository, the rights holder of the object must also be able to determine that the object was not altered by the repository in any way. Similarly, when an RMS tells a 15 repository to send a copy to an object requester, the repository must be able to verify that a valid RMS is sending the command to the repository. When any correspondence is sent to the rights registration applicant from the registration system, the applicant 20 must be able to determine that the registration system was truly the source. As objects and other information are transmitted between the various system components, the privacy of the information must be ensured.

The system uses available public key and digital 25 signature technology to handle privacy and authentication in the system as follows.

In conventional cryptography, a mathematical function and a secret key are shared by parties who wish to communicate confidentially. Each message to be sent 30 is encrypted using the function and key, and the recipients decrypt it using the same function and key.

In conventional cryptography the keys must be kept secret and must be distributed by secure means. The notions of two Stanford University researchers, Martin 35 Hellman and Whitefield Diffie, opened up a new way of

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thinking about key management. One key could be made public (e.g. the one used for encryption) and the other key would be kept private. Anyone knowing the public part of a pair of keys could use it to prepare a message
5 which would remain confidential until the person knowing the private key used it to decrypt the message. The public keys could be listed in public directories since knowing them did not help anyone decrypt messages encrypted using the public key.

10 Three researchers at MIT, Rivest, Shamir and Adelman, later developed a pair of functions meeting the requirements specified by Diffie and Hellman. These functions are now known as the RSA algorithms. There are also other known ways to implement public key algorithms.

15 Since either key of a public key cryptography pair can be used to perform the initial encryption, an interesting effect can be achieved by using the secret key of the pair to encrypt messages to be sent. Anyone with access to the public key can decrypt the message and
20 on doing so successfully, knows that the message must have been sent by the person holding the corresponding secret key. This use of the secret key acts like a signature, since the decryption only works with the matching public key. If the public key for the sender is
25 stored in a public directory, any recipient can verify the identity of the sender.

As shown in Figure 3, the private key 100 can also be used to prove that an object 102 has not been altered by anyone after the object's rights holder (e.g., an
30 author) has fixed the representation of the object. If the author performs a hash 104 over all of the object's bits, and then encrypts 106 the hash value with his secret key 100 to produce a digital signature 105, a recipient can decrypt the hash value, rehash the original

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object and compare the two hash values to ensure that the object has not been altered.

One problem that must still be addressed is knowing whether a public key 108 found in a directory for a given correspondent is valid or a bogus key inserted by a malicious person. One way to deal with this is to create certificates 110 containing the name 112 of the owner of the public key and the public key 108 itself. This certificate is signed with the private key of a well-known certificate signing authority 114, shown in Figure 6. The public key of the signing authority is also published in a certificate which is signed by a higher-level signing authority 116. In essence, a hierarchy of certificate authorities has been created.

In order to make an object be private in an efficient manner, a combination of public key cryptography and conventional private key cryptography is used. Since public key cryptographic algorithms require a substantial amount of computing power, an object will initially be encrypted with a secret key algorithm, such as DES, which is computationally more efficient. The DES private key will then be encrypted with the public key of the recipient. This encrypted DES key will be sent to the recipient, along with the encrypted object.

Many of the object and information transfers performed in the system are provided by Privacy Enhanced Mail (PEM,) which was developed by Trusted Information Systems of Glenwood, Maryland. The PEM system (and other similar available systems) can provide message privacy and correspondent authentication. There are other systems Other messages will be sent between system components via direct connections (e.g., "TCP/IP"). The TISPEM library, developed by RSA, is used to provide message privacy and correspondent authentication.

Object Handles

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We turn now to a more detailed discussion of the elements of the handle system.

Handles should be globally unique across the network and over time; should be essentially permanent, 5 since rights on an object may last many years; should not have any location information encoded in the identifier's namespace, since an object may be located at multiple and changing locations over time; the identifier's namespace must be variable and unrestricted, since the number of 10 digital objects created may be expected to increase; once a user acquires an object's identifier, he should be able use the handle to ascertain the current location of the object; multiple authorities should be able to generate the identifiers.

15 In addition, the following constraints on the use of an object handle are preferred: users of an object do not need to know its location, only its identifier; objects may be moved from one storage facility to another without affecting users; users should be able to choose 20 object providers based upon the terms and conditions associated with an object, including its costs.

The authorization and rules for creating a handle are determined on a country-by-country basis. In one scheme, as seen in Figure 5, handles are printable 25 strings 130, having a country code 132 appended to a variable length string defined on a per country basis 134.

Within the United States, the variable length string could be generated in a form similar to a domain 30 name within the Internet, Figure 6. Authority zones could be established, and each zone authority could be able to assign handles directly or create subzone 140 authorities. A time stamp 142 and serial number 144 would be used to create a unique identifier within an 35 authority zone.

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More generally, as seen in Figure 32, a handle consists of two logical parts, concatenated with an intervening separator character 1202. The two logical parts are: 1) name 1204 of a local naming authority, which controls the handle generation process, and 2) a locally unique string 1206, which is assigned by (one of) its handle generator(s). An originator may ask a handle generator for a handle, or it may propose a local string to be used. The local handle generation process should insure that local strings are unique. Handles have no prescribed maximum length in principle, but there will be a default length in existence at any time which can be adjusted upwards if necessary.

For handles to be unique, the names of local naming authorities are controlled by the global naming authority 1114 (Fig. 28) for the handle system. The global naming authority generates names for local naming authorities, and assigns these to local naming authorities for use by the handle generators they authorize. A prospective local naming authority may propose a name for itself to the global naming authority for validation and registration. A local naming authority, named, say, "X", may create additional, derived naming authorities of the name "X.Y", etc., each authorizing its own handle generator.

In addition to the first globally assigned component (e.g. "X"), each subsequent component field of a naming authority name (e.g. "Y", or "Z") must be non-null and not contain the character ".". There may be other restrictions on the non-alphanumeric characters to be used in naming authority names. In particular, the default separator character is "/" (so, e.g., "X.Y/local-string" is a typical handle from the naming authority "X.Y"). Other separator characters, and a syntax for defining another separator characters, (from a

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restricted class of non-alphanumeric characters) may be defined, and may entail other restrictions on the possible characters used in naming authority names. e.g., a conceivable syntax is to specify a non-default
5 separator by an initial non-alphanumeric character, so that "%X.Y%local-string" is a valid handle. Otherwise identical handles with different separators may be identical or distinct, escape characters for restricted characters may exist, and the separator characters may be
10 restricted (e.g., whether "a/b" is a possible naming authority name that can only be used with a non-default separator). Initially, naming authority names could be issued conservatively, being restricted to alphanumeric characters. An indirect handle is a special type of data
15 field that can be held in a handle record. The data field contains the address of a handle server, with a specific data type to indicate that this is an indirect handle. A handle server addresses is either an IP address or a domain name. One use of an indirect handle
20 is to allow reorganization of handles amongst handle servers. Indirect handles are left as forwarding addresses.

Naming authorities

The name of a naming authority, n, consists of one
25 or more strings, separated by periods. Examples are:

berkeley.cs

cnri.cs-tr.technology

The high-order part of the name ("berkeley" in the first example) is issued by the global naming authority.

30 Example. The global naming authority issues the name "cnri". Future naming authorities, created by cnri, might be "cnri.cs- tr" or "cnri.xiwt".

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As seen in Figure 33, each naming authority, n, has at least one super-administrator 1210 who has full privileges for that naming authority 1212, including permission to create a lower order naming authority, n.n', with its own super-administrator. This super-administrator creates permissions for administration of handles within that naming authority 1214, and can also create new naming authorities, n.n'.n'', and so on. Super-administrators can delegate privileges to other administrators, including the privilege of creating naming authorities.

Example. The super-administrator for "cnri.cs-tr" can create a naming authority "cnri.cs-tr.technology".

Every naming authority has associated with it a primary handle server, denoted by P. When a new naming authority is created, the primary handle server is initially set to be the global handle server, G. Thereafter the administrator of the naming authority can designate any handle server as its primary handle server, P.

Whenever the naming authority, n, creates a handle, n/d, either the handle, n/d, is stored in P or an indirect handle is stored in P, indicating that n/d exists and pointing to a handle server that holds n/d. Thus the primary handle server of any naming authority has handle records for all naming authorities that the naming authority has created.

When a new naming authority, n.n', is created, it is given a handle. The form of the handle is: n.n'. The data part is null. The data field of the handle record contains the address of the primary handle server, P.

The handle for the naming authority is stored both in the global handle server 1216 and in the primary handle server of n. Thus the global handle server has records for all naming authorities.

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Handle generators

The handle generator 1220 may be a person, an organization, or a fully-automated process running on some machine or a set of machines. An originator may control a naming authority, but there may be naming authorities that are not controlled by originators.

An originator may propose handles to be assigned to its digital objects. The handle generator need not assume any responsibility for insuring that a handle which it generates is associated with any particular digital object; that correspondence may be left to the originator.

Handle generators create new handles on demand of object rights holders who wish to have handles assigned to objects.

When an object is deposited in a repository, the repository contains a copy of the object plus identification of certain simple terms and conditions for obtaining a copy of the object and using it. The rights management system contains non-simple (i.e., requiring additional negotiation) terms and conditions for obtaining a digital object and using it, and could also contain simple terms. The pointer to the repository may be null if the object is not available on-line. Certain objects may be required to be persistent for legal and other reasons. The pointer to the rights management system may be null if only simple terms and conditions contained in the repository (or null terms and conditions) govern the use of the object.

30 Handle Servers

Handle servers have the following characteristics: a handle server holds pointers associated with a subset of all handles; handles are assigned to handle servers based upon hash values computed on the handles; handle servers are assigned ranges of hash values; the set of

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all hash values is partitioned among the set of all handle servers. This leads to a highly efficient and reliable mechanism for locating objects and from handles. Other less efficient or less reliable methods could also
5 be used. Handle servers may be configured to broadcast requests for handles to other handles servers, further enhancing the reliability and effectiveness of the system.

As seen in Fig. 34, the handle server system 1230
10 includes handle servers 1232 and handle directory servers 1234 located at certain well known locations. The directory servers will maintain a table of network addresses of handle servers (generally, each handle server will contain such a directory). This table will
15 generally be downloaded by each participating site frequently enough to be "acceptably" up-to-date at all times.

Global Handle Server

The global handle server is a distributed system
20 that stores and resolves handles. It is publicly accessible. The system is highly secure, is fault tolerant, and designed to run continuously. The global handle server is denoted by G.

One function of G is to store handle records 1236
25 for items that must be retained over very long periods of time, such as copyright registration, or legal records. G also stores handles for all naming authorities and local handle servers.

G is a public service and any client can ask G to
30 resolve any handle. Since the handles for all naming authorities and registered handle servers are stored in G, and G is public, the name of every naming authority, n, and its primary handle server, P, are public and available to all clients.

35 Local Handle Server

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Local handle servers are a local option. They work in conjunction with the global handle server to store and resolve handles locally. They provide increased local control of handles, distribute the computing load between central and locally supplied equipment, and provide simple access controls to handle data. By storing individual handles on both a local and the global handle server, they can be used to back up each other.

Local handle servers can be created and operated by naming authorities or repositories. Other organizations, such as service bureaus, can also create and run local handle servers. For a local handle server to become a registered part of the overall handle system, it must be given a handle (by some naming authority). This handle is then stored in G, the global handle server.

Local handle servers are not public services. Permissions for a client to use local handle server to resolve a handle are set by the system administrators. Currently, the only such method of access control is by the IP address of the client that makes a query to the handle server.

Each local handle server is implemented as a set of one or more server computers. When several computers are used, handles are distributed amongst them using a hash table. For reasons of performance and reliability, data may be replicated across these computers, but this is hidden from client programs.

Caching handle servers 1242 also may be run at local workstations on behalf of individual users to store location information for frequently used handles.

Storing Handles

Naming authorities can choose to store the handles that they create on any handle servers for which they

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have access permissions, local or global. When a handle is stored in several servers, one is declared to be authoritative. This can be the global handle server, G, the primary handle server, P, or another local handle server, subject to the naming authority having administrative permission to store handles on that handle server.

G is publicly accessible for handle resolution. If a handle is stored in G, then any client can resolve it. Handles stored on other handles servers can be resolved only by clients that have suitable permissions.

Example. The naming authority "cmu.cs.robotics" might choose G as authoritative for the handle to an important object, and also enter the handle in its primary handle server, P, for local use.

When n creates a handle, it makes a record in P, the primary handle server of naming authority n, with an indirect handle to each handle server that is able to resolve this handle. This indirect handle indicates that the handle exists and can be resolved by a query to the appropriate handle server. Access controls on P should be set so that any client with permission to query the handle server is able to read this indirect handle.

Example. The naming authority "cnri.cs-tr.technology" creates a handle "cnri.cs-tr.technology/d1" which is stored in the global handle server. An indirect handle is stored in the primary handle server indicating that a handle "cnri.cs-tr.technology/d1" is stored in the global handle server.

30 Resolution of Handles

The handle system provides a client library of routines 1244, currently written in the C programming language. They interface with the global and local handle servers and with caching servers. They can be