

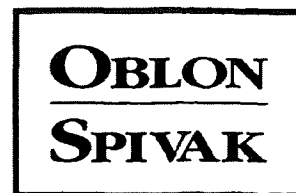
Exhibit 16



06/24/10



Docket No.: 358121US91RX



Reexam

ATTORNEYS AT LAW

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

RE: Control No.: 90/010,856
Inventor(s): Richard Michael NEMES
Filing Date: February 9, 2010
For: METHODS AND APPARATUS FOR INFORMATION STORAGE
AND RETRIEVAL USING A HASHING TECHNIQUE WITH
EXTERNAL CHAINING AND ON-THE-FLY REMOVAL OF
EXPIRED DATA
Group Art Unit: 3992
Examiner: A. J. Kosowski

SIR:

Attached hereto for filing are the following papers:

IDS Transmittal

PTO Form 1449

Cited References (50) - 1 Box

Submission under 37 C.F.R. 1.555/1.565 in Ex Parte Reexamination of

U.S. Patent No. 5,893,120 w/Attachments (3) - 1 Box

Certificate of Service

Credit card payment is being made online (if electronically filed), or is attached hereto (if paper filed), in the amount of **\$0.00** to cover any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, please charge or credit the difference to Deposit Account No. **15-0030**.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, L.L.P.


Scott A. McKeown

Registration No. 42,866

Customer Number

22850

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(OSMMN 10/09)

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1940 DUKE STREET ■ ALEXANDRIA, VIRGINIA 22314 ■ U.S.A.
TELEPHONE: 703-413-3000 ■ FACSIMILE: 703-413-2220 ■ WWW.OBLON.COM

Defendants' Exhibit

Exhibit No. 147C

Case No. 6:09-cv-00269-LED

YAHOO00525252



358121US91RX

06/24/10

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Richard Michael NEMES

CONTROL 90/010.856

GAU: 3992

NO:

FILED: February 9, 2010

EXAMINER: A. J. KOSOWSKI

FOR: METHODS AND APPARATUS FOR INFORMATION STORAGE AND RETRIEVAL USING A HASHING
TECHNIQUE WITH EXTERNAL CHAINING AND ON-THE-FLY REMOVAL OF EXPIRED DATA**INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97**COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Applicant(s) wish to disclose the following information.

REFERENCES

- ☒ The applicant(s) wish to make of record the reference(s) listed on the attached form PTO-1449 and/or accompanying documents from a corresponding foreign application. Copies of the listed reference(s) are attached, where required, as are either statements of relevancy or any readily available partial or full English translations of pertinent portions of any non-English language reference(s).
- ☐ Credit card payment is being made online (if electronically filed), or is attached hereto (if paper filed), in the amount required under 37 CFR §1.17(p).

RELATED CASES

- ☐ Attached is a list of applicant's pending application(s), published application(s) or issued patent(s) which may be related to the present application. In accordance with the waiver of 37 CFR 1.98 dated September 21, 2004, copies of the cited pending applications are not provided. Cited published and/or issued patents, if any, are listed on the attached PTO form 1449.
- ☐ Credit card payment is being made online (if electronically filed), or is attached hereto (if paper filed), in the amount required under 37 CFR §1.17(p).

CERTIFICATION

- ☐ Each item of information contained in this information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- ☐ No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
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06/24/10

SHEET 1 OF 4

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 358121US91RX		CONTROL NO. 90/010,856	
LIST OF REFERENCES CITED BY APPLICANT				INVENTOR Richard Michael NEMES			
				FILING DATE February 9, 2010		GROUP 3992	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	5,701,432	12/23/1997	Wong, et al.			
	AB	4,695,949	09/22/1987	Thatte, et al.			
	AC	4,989,132	01/29/1991	Mellender, et al.			
	AD	4,996,663	02/26/1991	Nemes			
	AE	5,043,885	08/27/1991	Robinson			
	AF	5,765,174	06/09/1998	Bishop			
	AG	5,778,430	07/07/1998	Ish, et al.			
	AH	5,991,775	11/23/1999	Beardsley, et al.			
	AI	6,119,214	09/12/2000	Dirks			
	AJ	5,881,241	03/09/1999	Corbin			
	AK	6,243,667	06/05/2001	Kerr, et al.			
	AL						
	AM						
	AN						
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES NO		
	AO						
	AP						
	AQ						
	AR						
	AS						
	AT						
	AU						
	AV						
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	AW	Johnson, T. et al.; A Distributed, Replicated, Data-Balanced Search Structure; Pgs. 1-27					
	AX	Appel, A. W., et al.; Hash-consing Garbage Collection; Pgs. 1-18; 02/1993					
	AY	Bays, C.; Some Techniques for Structuring Chained Hash Tables; The Computer Journal; Vol. 16.; No. 2; Pgs. 126-131; 04/1972					
	AZ	Bastani, F. B., et al.; Concurrent Maintenance of Data Structures in a Distributed Environment; The Computer Journal; Vol. 31; No. 2; 1988; Pgs. 165-174				<input checked="" type="checkbox"/> Additional References sheet(s) attached	
Examiner					Date Considered		
*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

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OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	AAA	Kruse, R. L., et al.; CD-ROM Prepared by Mailhot, P.A.; Prentice Hall - Data Structures and Program Design in C++; 2000; 717 Pgs.					
	AAB	Kirsch, A., et al; Hash-Based Techniques for High-Speed Packet Processing; Pgs. 1-40					
	AAC	Seligmann, J., et al.; Incremental Mature Garbage Collection Using the Train Algorithm; 1995; Pgs. 235-252					
	AAD	Bohannon, P., et al.; The Architecture of the Dali Main-Memory Storage Manager; 1997; Pgs. 115-151					
	AAE	Van Wyk, C. J., et al.; Algorithmica - The Complexity of Hashing with Lazy Deletion; 1986; Pgs. 17-29					
	AAF	Szymanski, T. G., et al.; Special Feature: Goalie: A Space Efficient System for VLSI Artwork Analysis; 1985; Pgs. 64-72					
	AAG	van Rijsbergen, C. J.; Department of Computing Science - University of Glasgow; Information Retrieval; Pgs. 1-147					
	AAH	Jannick, J.; Sigmond Record, Vol. 24, No. 1; Implementing Deletion in B+-Trees; 03/1995; Pgs. 33-38					
	AAI	Rusling, D. A.; The Linux Kernel; Version 0.8-3; Pgs. 1-176					
	AAJ	Chandranmenon, G. P.; et al.; IEEE/ACM Transactions on Networking, Vol. 4, No. 2; Trading Packet Headers for Packet Processing; Pgs. 141-152; 1996					
	AAK	Ramakrishna, M. V.; Hashing in Practice, Analysis of Hashing and Universal Hashing; 1988; Pgs. 191-199					
	AAL	Varghese, G., et al.; Hashed and Hierarchical Timing Wheels: Data Structures for the Efficient Implementation of a Timer Facility; 1987; Pgs. 25-38					
	AAM	Waldvogel, M., et al.; Scalable High Speed IP Routing Lookups; 1997; Pgs. 25-36					
	AAN	Fagin, R., et al.; ACM Transactions on Database Systems, Vol. 4, No. 3; Extendible Hashing - A Fast Access Method for Dynamic Files; 09/1979; Pgs. 315-344					
	AAO	Schmidt, J. P., et al.; On Aspects of Universality and Performance for Closed Hashing; 1989; Pgs. 355-366					
	AAP	Larson, P. A; Algorithms and Data Structures; Dynamic Hash Tables, Volume 31, No. 4; 04/1988; Pgs. 446-457					
	AAQ	Chiang, K. W., et al.; Time Efficient VLSI Artwork Analysis Algorithms in GOALIE2; 1988; Pgs. 471-476					
Examiner				Date Considered			
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				FILING DATE February 9, 2010		GROUP 3992	
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	AAA	Maurer, W. D., et al.; Computing Surveys, Vol. 7, No. 1; Hash Table Methods; 03/1975; Pgs. 5-19					
	AAB	Deutsch, L. P., et al.; Communications of the ACM, Vol. 19, No. 9; An Efficient, Incremental, Automatic Garbage Collector; 09/1976; Pgs. 522-526					
	AAC	Graham, S. L., et al.; Communications of the ACM, Vol. 21, No. 7; Pseudochaining in Hash Tables; 07/1978; Pgs. 554-557					
	AAD	Yao, A.; Journal of the Association for Computing Machinery, Vol. 28, No. 3; Should Tables be Sorted?; 07/1981; Pgs. 615-628					
	AAE	Karger, D., et al; Consistent Hashing and Random Trees: Distributed Caching Protocols for Relieving Hot Spots on the World Wide Web; 1997; Pgs. 654-663					
	AAF	Celis, P., et al; Information Sciences 62, The Analysis of Hashing with Lazy Deletions; 1992; Pgs. 13-26					
	AAG	Albers, S., et al.; Self-Organizing Data Structures; Pgs. 1-39					
	AAH	Seltzer, M.; A New Hashing Package for UNIX; Winter '91; Pgs. 173-184					
	AAI	Tamassia, R.; ACM Computing Surveys, Vol. 28, No. 1; Data Structures; 03/1996; Pgs. 23-26					
	AAJ	Morrison, J. A., et al; SIAM J. Comp., Vol. 16, No. 6 - A Queuing Analysis of Hashing with Lazy Deletion; 12/1987; Pgs. 1155-1164					
	AAK	Dietzfelbinger, M., et al.; Dynamic Perfect Hashing: Upper and Lower Bounds, Revised Version; 01/07/1990; Pgs. 1-33					
	AAL	Kenyon-Mathieu, C.M., et al.; General Methods for the Analysis of the Maximum Size of Dynamic Data Structures; Pgs. 473-487					
	AAM	Mathieu, C. M., et al.; Rapports de Recherche N°851, Maximum Queue Size and Hashing with Lazy Deletion; 06/1988; 23 Pgs.					
	AAN	Aldous, D., et al.; SIAM J. Comp., Vol. 21, No. 4, Maximum Size of a Dynamic Data Structure: Hashing with Lazy Deletion Revisited*; 08/1992; Pgs. 713-732					
	AAP	Printout - Ethernet Address Resolution Protocol; 7 Pgs.					
	AAQ	Printout - Copyright (c) 1989, 1993 - The Regents of University of California; Copyright (c) 1995 - Paul Henning Kamp; 6 Pgs.					
Examiner				Date Considered			
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				FILING DATE February 9, 2010		GROUP 3992	
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)							
	AAA	Printout - Copyright (c) 1994 by Florian La Roche; Pgs. 1-20					
	AAB	Brown, E. W.; Execution Performance Issues in Full-Text Information Retrieval - Technical Report 95-81; 10/1995; 179 Pgs.					
	AAC	Costello, A. M., et al.; Redesigning the BSD Callout and Timer Facilities; 11/02/1995; 12 Pgs.					
	AAD	Foster, J. M. - Senior Research Fellow, Dept. of Engineering, Aberdeen University; List Processing; 1967; 54 Pgs.					
	AAE	Printout - Wavelan Pcmcia driver, Jean II-HPLB '96; Pgs. 1-78					
	AAF	Van Wyk, C. J.; Data Structures & C Programs; 1988; 30 Pgs.					
	AAG	Sessions, R., Reusable Data Structures For C; 1989; 33 Pgs.					
	AAH	Frakes, W. B., et al.; Information Retrieval Data Structures & Algorithms, Chapter 13; 1992; Pgs. 293-305					
	AAI	Weiss, M. A.; Data Structures and Algorithm Analysis in C; 23 Pgs.					
	AAJ	Keshav, S.; On the Efficient Implementation of Fair Queuing; Pgs. 1-20					
	AAK	Kruse, R. L.; Data Structures and Program Design, 2 nd Edition, Chapter 4; 1987, 1984; Pgs. 104-155					
	AAL	Varghese, G., et al.; Hashed and Hierarchical Timing and Wheels: Data Structures for the Efficient Implementation of a Timer Facility; 1987; Pgs. 25-38					
	AAM	Xu, J.; IEEE Transactions on Computers, Vol. 51, No. 9; Cost-Effective Flow Table Designs for High-Speed Routers: Architecture and Performance Evaluation; 09/2002; Pgs. 1089-1099					
	AAN						
	AAO						
	AAP						
	AAQ						
Examiner						Date Considered	
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64811 U.S. P.T.O. DOCKET NO: 358121US91RX



IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE REEXAMINATION OF :

U.S. PATENT NO. 5,893,120

INVENTOR:

: EXAMINER: A. J. KOSOWSKI

RICHARD MICHAEL NEMES

CONTROL NO: 90/010,856

:

FILED: FEBRUARY 9, 2010

: GROUP ART UNIT: 3992

FOR: METHODS AND APPARATUS FOR :
INFORMATION STORAGE AND
RETRIEVAL USING A HASHING
TECHNIQUE WITH EXTERNAL
CHAINING AND ON-THE-FLY
REMOVAL OF EXPIRED DATA

SUBMISSION UNDER 37 C.F.R. § 1.555/1.565 IN *EX PARTE* REEXAMINATION OF
U.S. PATENT NO. 5,893,120

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Attached are litigation materials corresponding to the patent at issue in this reexamination, styled as *Bedrock Computer Technologies, LLC v. Soflayer Technologies, Inc., et al.*, Case No. 6:09-cv-269 LED (E.D. Tex., Tyler Division) and *Red Hat, Inc. v. Bedrock Computer Technologies, LLC*, Case no. 6:09-cv-549-LED (E.D. Tex., Tyler Division).

- Defendants' Amended Joint Invalidity Contentions and Production of Documents Pursuant to Patent Rules 3-3 and 3-4(b) w/Exhibits A-C5 dated 02/08/10.
- Defendants' Joint Invalidity Contentions and Production of Documents Pursuant to Patent Rules 3-3 and 3-4(b) w/Exhibits A-E dated 01/08/10.

Control No. 90/010,856

Submission under 37 C.F.R. §1.555/1.565 in *Ex Parte* Reexamination of
U.S. Patent No. 5,893,120

- Plaintiff Red Hat, Inc.'s Invalidity Contentions and Production of Documents
Pursuant to Patent Rules 3-3 and 3-4(b) w/Exhibits A-E dated 05/14/10.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, L.L.P.



Scott A. McKeown
Attorney of Record
Registration No. 42,866

Customer Number

22850

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(OSMMN 07/09)

06/24/10

CERTIFICATE OF SERVICE

I hereby certify that on June 24, 2010, copies of the foregoing PTO Cover Letter; IDS Transmittal; PTO Form 1449; Cited References (50) and Submission under 37 C.F.R. 1.555/1.565 in *Ex Parte* Reexamination of U.S. Patent No. 5,893,120 w/Attachments (3) on CD were served via First Class Mail to the following:

Novak, Druce & Quigg LLP
(NDQ Reexamination Group)
1000 Louisiana Street, 53rd Floor
Houston, TX 77002

Dated: _____

6-24-10



Scott A. McKeown