Electronic Version v1.1 Stylesheet Version v1.1

 SUBMISSION TYPE:
 NEW ASSIGNMENT

 NATURE OF CONVEYANCE:
 AMENDED AND RESTATED INTELLECTUAL PROPERTY SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date
MINERVA NETWORKS, INC.	05/09/2008

RECEIVING PARTY DATA

Name:	SILICON VALLEY BANK
Street Address:	3003 Tasman Drive
City:	Santa Clara
State/Country:	CALIFORNIA
Postal Code:	95054

PROPERTY NUMBERS Total: 10

Property Type	Number
Patent Number:	6769127
Patent Number:	6782550
Patent Number:	6973667
Application Number:	10899712
Application Number:	11066985
Application Number:	11183001
Application Number:	11257238
Application Number:	11619934
Application Number:	12061051
Application Number:	60990557

CORRESPONDENCE DATA

Fax Number: (866)459-2899

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 202-783-2700

PATENT REEL: 021076 FRAME: 0859

500564413

Email: Oleh.Hereliuk@federalresearch.com Correspondent Name: CBCInnovis dba Federal Research Address Line 1: 1023 Fifteenth Street, NW, Ste 401 Address Line 2: attn: Oleh Hereliuk Address Line 4: Washington, DISTRICT OF COLUMBIA 20005 ATTORNEY DOCKET NUMBER: 415494 NAME OF SUBMITTER: Oleh Hereliuk **Total Attachments: 10** source=415494#page1.tif source=415494#page2.tif source=415494#page3.tif source=415494#page4.tif source=415494#page5.tif source=415494#page6.tif source=415494#page7.tif

source=415494#page8.tif source=415494#page9.tif source=415494#page10.tif

> PATENT REEL: 021076 FRAME: 0860

EXHIBIT B

PATENTS

Debtor: MINERVA NETWORKS, INC.

Minerva Networks I	Patent Portfolios	T			Prepared by Roger Chu	5/27/200
Case Number	Status	MaintFee Due Date	Filing Date	App. No. Pub/Palent No.	Title	First Inventor
MINEPOSS/MN-006	issued issued 7/27/2004 Expires 6/16/2020	7/27/07 1/26/08	GG/16/CG	09/595,648 6,7 6 9,127	Method and system for delivering media service and applications over networks	Mauro Bonomi
MINEP005/MN-011	Issued Issued 8/24/2004 Expires 6/16/2020	8/24/07 2/25/08	06/16/00	09/596,326 6,782,550	Porgram guide with a current-time bar	Yousheng Cao
MINEPO16/MN-022	Issued 12/6/2005 Expires 03/01/2021	12/6/08 6/6/09	03/01/01	09/798,264 6,973,667	Method and system for providing time-shifted delivery of live media programs	Jean-Georges Fritsch
MNINE003 China	Issued 12/7/2005 Expires 1/10/2024	5/30/2008	05/30/01	ZL01802204.9	Method and system for delivering media service and applications over networks	Yousheng Cao
MN-008C1	Pending		07/26/04	10/899,712	Method and system for delivering media service and applications over networks	Mauro Bonomi
MN-007	Pending		02/25/05	11/036,985	Method and system for recording scheduled programs with an optional backup copy stored in a centrally located storage server farm	ı Jean-Georges Fritsch
MN-026	Pending	T T	07/15/05	11/183,001	Method and system for image windowing	Vu Hwang
MN-027	Pending		10/24/05	11/257,238	Method and system for multimedia data windowing	Vu Hwang
MN-028	Pending		1/4/2007	11/619,934	Fast channel change in IPTV	Jean-Georges Fritsch
MN-029	Pendng		4/2/2008	12/061,051	Personalized services from content providers to end users in IPTV	Jean-Georges Fritsch
ми-озтр	Pending		11/27/2007	60/990,557	Methods and Apparatus for Placing Advertisement between Channel Changes in a Digital Television System	Jean-Georges Fritsch

AMENDED AND RESTATED

INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Amended and Restated Intellectual Property Security Agreement (this "Agreement") is entered into as of May 9, 2008 by and between SILICON VALLEY BANK ("Secured Party"), on the one hand, and MINERVA NETWORKS, INC. ("Debtor"), on the other hand.

RECITALS

- A. Debtor and Secured Party are parties to: (A) that certain Loan and Security Agreement, dated as of May 11, 2007 (as amended, restated, supplemented or otherwise modified from time to time, the "Non-Exim Loan Agreement"); and (B) that certain other Loan and Security Agreement (Exim Program), dated as of May 11, 2007, (as amended, restated, supplemented or otherwise modified from time to time, the "Exim Loan Agreement"), between them. As used herein, the term "Loan Agreement" means, individually and collectively, the Non-Exim Loan Agreement and the Exim Loan Agreement.
- B. Pursuant to the terms of the Loan Agreement, Debtor has granted to Secured Party security interests in all of Debtor's right, title and interest, whether presently existing or hereafter acquired, in, to all Intellectual Property Collateral and all other Collateral.
- This Agreement amends and restates in its entirety that certain Collateral C. Assignment, Patent Mortgage, and Security Agreement, dated as of April 14, 1999, between Debtor and Secured Party, and recorded with the United States Patent and Trademark Office on May 24, 1999 at Reel 009980 / Frame 0811 with respect to the Patents identified therein, as amended by that certain Amendment to Loan Documents, dated July 26, 2001, between Debtor and Secured Party, as further amended by that certain Supplement One to Collateral Assignment, Patent Mortgage, and Security Agreement, dated as of July 26, 2001, between Debtor and Secured Party, and recorded with the United States Copyright Office on August 6, 2001 at Volume 3472 / Page 746 with respect to the Copyrights identified therein, and also recorded with the United States Patent and Trademark Office on August 3, 2001 at Reel 012043 / Frame 0818 with respect to the Patents identified therein, as further amended by that certain Supplement Two to Collateral Assignment, Patent Mortgage, and Security Agreement, dated as of August 28, 2001, between Debtor and Secured Party, and recorded with the United States Copyright Office on September 20, 2001 at Volume 3474 / Page 289 with respect to the Copyrights identified therein, and as further amended by that certain Amendment to Loan Documents, dated May 11, 2007, between Debtor and Secured Party (as so amended and as otherwise amended, restated, supplemented, or otherwise modified from time to time prior to the date hereof, the "Prior IP Security Agreement").

NOW, THEREFORE, as collateral security for the payment and performance when due of all of the Obligations, Debtor hereby grants, represents, warrants, covenants and agrees as follows:

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AGREEMENT

- 1. <u>Grant of Security Interest.</u> To secure all of the Obligations, Debtor grants and pledges to Secured Party a security interest in all of such Debtor's right, title and interest in, to and under its Intellectual Property Collateral, including without limitation the following:
- (a) All of present and future United States <u>registered</u> copyrights and copyright registrations, including, without limitation, the registered copyrights, maskworks, software, computer programs and other works of authorship subject to United States copyright protection listed in <u>Exhibit A</u> to this Agreement (and including all of the exclusive rights afforded a copyright registrant in the United States under 17 U.S.C. §106 and any exclusive rights which may in the future arise by act of Congress or otherwise) and all present and future applications for copyright registrations (including applications for copyright registrations of derivative works and compilations) (collectively, the "Registered Copyrights"), and any and all royalties, payments, and other amounts payable to Debtor in connection with the Registered Copyrights, together with all renewals and extensions of the Registered Copyrights, the right to recover for all past, present, and future infringements of the Registered Copyrights, and all computer programs, computer databases, computer program flow diagrams, source codes, object codes and all tangible property embodying or incorporating the Registered Copyrights, and all other rights of every kind whatsoever accruing thereunder or pertaining thereto.
- (b) All present and future copyrights, maskworks, software, computer programs and other works of authorship subject to (or capable of becoming subject to) United States copyright protection which are not registered in the United States Copyright Office (the "Unregistered Copyrights"), whether now owned or hereafter acquired, and any and all royalties, payments, and other amounts payable to Debtor in connection with the Unregistered Copyrights, together with all renewals and extensions of the Unregistered Copyrights, the right to recover for all past, present, and future infringements of the Unregistered Copyrights, and all computer programs, computer databases, computer program flow diagrams, source codes, object codes and all tangible property embodying or incorporating the Unregistered Copyrights, and all other rights of every kind whatsoever accruing thereunder or pertaining thereto. The Registered Copyrights and the Unregistered Copyrights collectively are referred to herein as the "Copyrights."
- (c) All right, title and interest in and to any and all present and future license agreements with respect to the Copyrights.
- (d) All present and future accounts, accounts receivable, royalties, and other rights to payment arising from, in connection with or relating to the Copyrights.
- (e) All patents, patent applications and like protections including, without limitation, improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same, including without limitation the patents and patent applications set forth on Exhibit B attached hereto (collectively, the "Patents");
- (f) All trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Debtor connected with and symbolized by such trademarks, including without limitation those set forth on Exhibit C attached hereto (collectively, the "Trademarks");

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- (g) Any and all claims for damages by way of past, present and future infringements of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the rights identified above;
- (h) All licenses or other rights to use any of the Copyrights, Patents or Trademarks, and all license fees and royalties arising from such use to the extent permitted by such license or rights;
- (i) All amendments, extensions, renewals and extensions of any of the Copyrights, Trademarks or Patents; and
- (j) All proceeds and products of the foregoing, including without limitation all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing, and all license royalties and proceeds of infringement suits, and all rights corresponding to the foregoing throughout the world and all re-issues, divisions continuations, renewals, extensions and continuations-in-part of the foregoing.
- Loan Agreement. The security interests hereunder are granted in conjunction with the security interests granted to Secured Party under the Loan Agreement. The rights and remedies of Secured Party with respect to the security interests granted hereby are in addition to those set forth in the Loan Agreement and the other Loan Documents, and those which are now or hereafter available to Secured Party as a matter of law or equity. Each right, power and remedy of Secured Party provided for herein or in the Loan Agreement or any of the other Loan Documents, or now or hereafter existing at law or in equity shall be cumulative and concurrent and shall be in addition to every right, power or remedy provided for herein and the exercise by Secured Party of any one or more of the rights, powers or remedies provided for in this Agreement, the Loan Agreement or any of the other Loan Documents, or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including Secured Party, of any or all other rights, powers or remedies.
- 3. <u>Covenants and Warranties.</u> Debtor represents, warrants, covenants and agrees as follows:
- (a) Debtor shall undertake all commercially reasonable measures to cause its employees, agents and independent contractors to assign to Debtor all rights of authorship to any copyrighted material in which Debtor has or may subsequently acquire any right or interest.
- (b) Debtor shall promptly advise Secured Party of any Trademark, Patent or Registered Copyright not specified in this Agreement, which is hereafter acquired by Debtor.
- (c) Section 6.8 of the Loan Agreement hereby is incorporated herein as though fully set forth herein, *mutatis mutandis*.
- 4. <u>General</u>. If any action relating to this Agreement is brought by either party hereto against the other party, the prevailing party shall be entitled to recover reasonable attorneys fees, costs and disbursements. This Agreement may be amended only by a written instrument signed by both parties hereto. To the extent that any provision of this Agreement conflicts with any provision of the Loan Agreement, the provision giving Secured Party greater rights or remedies

shall govern, it being understood that the purpose of this Agreement is to add to, and not detract from, the rights granted to Secured Party under the Loan Agreement. This Agreement, the Loan Agreement, and the other Loan Documents comprise the entire agreement of the parties with respect to the matters addressed in this Agreement. This Agreement shall be governed by the laws of the State of California, without regard for choice of law provisions. This Agreement is a Loan Document.

5. <u>CHOICE OF LAW, VENUE, JURY TRIAL WAIVER AND JUDICIAL REFERENCE.</u> SECTION 11 OF THE LOAN AGREEMENT HEREBY IS INCORPORATED HEREIN, MUTATIS MUTANDIS.

[remainder of page intentionally left blank; signature page immediately follows]

IN WITNESS WHEREOF, the parties have cause this Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

Address of Debtor: Debtor:

2150 Gold Street MINERVA NETWORKS, INC. Alviso, CA 95002

Title: CFO

Name: JOAN DOERNER

Address of Secured Party: Secured Party:

3003 Tasman Drive SILICON VALLEY BANK

By: JCC 29 C

Form: 3/1/02

Santa Clara, California 95054

EXHIBIT A

REGISTERED COPYRIGHTS

(including copyrights that are the subject of an application for registration)

Debtor: MINERVA NETWORKS, INC.

<u>Title</u>	Registration/ Application <u>Number</u>	Registration/ Application <u>Date</u>
Minerva iTV Manager	TX0005595017	2001-08-24
or		
ITV Manager		

EXHIBIT B

PATENTS

Debtor: MINERVA NETWORKS, INC.

Minerva Networks I	Patent Portfolios	,			Prepared by Roger Chu	5/27/200
Case Number	Status	MaintFee Due Date	Filing Date	App. No. Pub/Petent No.	Title	First (nventor
MINEP003/MN-006	issued Issued 7/27/2004 Expires 6/16/2020	7/27/07 1/26/08	06/16/00	09/595,848 6,759,127	Method and system for delivering media service and applications over networks	Mauro Bonomi
MINEP005/MN-011	Issued Issued 8/24/2004 Expires 6/16/2020	8/24/07 2/25/08	06/16/00	09/596,326 6,782,550	Porgram guide with a current-time bar	Yousheng Cao
MINEP016/MN-022	issued 12/6/2005 Expires 03/01/2021	12/5/08 5/6/09	03/01/01	09/798,264 6,973,667	Method and system for providing time-shifted delivery of live media programs	Jean-Georges Fritsch
MNINE003 China	Issued 12/7/2005 Expires 1/10/2024	5/30/2008	05/30/01	ŽL01802204.9	Method and system for delivering media service and applications over networks	Yousheng Cao
MN-006C1	Pending		07/26/04	10/899,712	Method and system for delivering media service and applications over networks	Mauro Borsomi
MN-C07	Pending		02/25/05	11/056,985	Method and system for recording scheduled programs with an optional backup copy stored in a centrally located storage server farm	Jean-Georges Fritsch
MN-026	Pending		07/15/05	11/183,001	Method and system for image windowing	Vu Hwang
MN-027	Pending		10/24/05	11/267,238	Method and system for multimedia data windowing	Vu Hwang
MN-028	Pendng		1/4/2007	11/619,934	Fast channel change in IPTV	Jean-Georges Fritsch
MN-029	Pendng		4/2/2008	12/051,051	Personalized services from content providers to end users in IPTV	Jean-Georges Fritsch
MN-031P	Pendag		11/27/2007	60/990,557	Methods and Apparatus for Placing Advertisement between Channel Changes in a Digital Television System	Jean-Georges Fritsch

EXHIBIT C

TRADEMARKS

Debtor: MINERVA NETWORKS, INC.

<u>Title</u>	Registration/ Application <u>Number</u>	Registration/ Application <u>Date</u>
Minerva	2028961	1997-01-07

SVB/Minerva/2008-05 IP Sec Agr-2.doc

RECORDED: 06/12/2008

PATENT REEL: 021076 FRAME: 0869