504968843 06/20/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5015589

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date				
CHIPWORKS INC.	06/14/2018				

RECEIVING PARTY DATA

Name:	TECHINSIGHTS INC.
Street Address:	1891 ROBERTSON ROAD
Internal Address:	SUITE 500
City:	OTTAWA, ONTARIO
State/Country:	CANADA
Postal Code:	K2H 5B7

PROPERTY NUMBERS Total: 1

Property Type	Number					
Patent Number:	7498181					

CORRESPONDENCE DATA

Fax Number: (949)760-9502

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 9497600404

Email: efiling@knobbe.com

Correspondent Name: KNOBBE MARTENS OLSON & BEAR, LLP

Address Line 1: 2040 MAIN STREET

Address Line 2: 14TH FLOOR

Address Line 4: IRVINE, CALIFORNIA 92614

ATTORNEY DOCKET NUMBER:	MERZ2.006GEN
NAME OF SUBMITTER:	VLADISLAV Z. TEPLITSKIY
SIGNATURE:	/Vladislav Z. Teplitskiy/
DATE SIGNED:	06/20/2018

Total Attachments: 13

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WHEREAS, CHIPWORKS INC., at one time a federal Canadian corporation and later an Ontario corporation, with an office at 1891 Robertson Road, Suite 500, Ottawa, Ontario K2H 5B7, Canada (which prior to the name change of the road was at Suite 500, 3685 Richmond Road, K2H 5B7, Ottawa, Ontario, Canada), (hereinafter "ASSIGNOR") represents and warrants that it was an owner of certain new and useful improvements, technology, inventions, developments, ideas and/or discoveries (individually and/or collectively referred to hereinafter as the "Inventions") disclosed in the patents listed in Schedule A (individually and/or collectively referred to hereinafter as the "Patents").

WHEREAS certain documentation, including assignments filed with the United States Patent and Trademark Office for the Patents used the name of CHIPWORKS, CHIPWORKS INCORPORATED, or CHIPWORKS, INCORPORATED to refer to ASSIGNOR.

WHEREAS, TECHINSIGHTS INC., and Ontario corporation, with offices at 1891 Robertson Road, Suite 500, Ottawa, Ontario K2H 5B7, Canada, (hereinafter "ASSIGNEE") effective January 1, 2017 amalgamated with ASSIGNOR as evidenced by the Articles of Amalgamation in Schedule B.

WHEREAS, effective January 1, 2017, ASSIGNOR AND ASSIGNEE ceased to exist as separate entities and continued as a single amalgamated Ontario corporation under ASSIGNEE's name, TECHINSIGHTS INC.

WHEREAS by virtue of the amalgamation, ASSIGNEE has acquired the entire right, title, and interest of ASSIGNOR in and to the Inventions and the Patents.

AND WHEREAS, ASSIGNEE desires to confirm that is has acquired the entire right, title, and interest of ASSIGNOR in and to the Inventions and the Patents.

NOW, THEREFORE, for good and valuable consideration of which receipt is hereby acknowledged, ASSIGNOR hereby acknowledges that ASSIGNOR has sold, assigned, transferred and set over, and by these presents does hereby sell, assign, transfer and set over, unto said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in the Patents and the Inventions, including all Patent Properties filed or issued upon the Patents and the Inventions; where "Patent Properties" include, but are not limited to:

all provisional applications relating thereto:

all nonprovisional applications claiming priority to aforementioned provisional(s) and/or the present Patents, including, all divisions, continuations, continuations-in-part, and reissues, and all Letters Patent of the United States which have been granted and/or may be granted thereon and all reissues and extensions thereof; and

all rights of priority under International Conventions and any related Letters Patent which may have been granted and/or may hereafter be granted or filed in any country or countries foreign to the United States, all extensions, renewals and reissues thereof.

ASSIGNOR hereby acknowledges the ASSIGNEE as the Applicant for all aforementioned Patent Properties, and authorizes and requests the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all related Letters Patent to the ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND ASSIGNOR DOES HEREBY sell, assign, transfer, and convey to ASSIGNEE, its successors, legal representatives, and assigns all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to ASSIGNEE, or may accrue hereafter, including, but not limited to, the right to sue for, collect, and retain damages for past infringements of said Letters Patent before or after issuance.

AND ASSIGNOR DOES HEREBY covenant and agree that ASSIGNOR will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to ASSIGNOR respecting the Inventions and Patents, and testify in any legal proceeding, assist in the preparation of any other

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Patent Property relating to the Patents and the Inventions or any improvements made thereto, sign/execute all lawful papers, authorize the filing of and execute and make all rightful oaths and/or declarations in connection with the Patents and the Inventions including any improvements made thereto, any patent applications filed therefrom, and any continuing application filed from any of the aforementioned applications, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for the Inventions in all countries.

TECHINSIGHTS INC. (on behalf of itself as well as CHIPWORKS INC., CHIPWORKS, CHIPWORKS INCORPORATED, and CHIPWORKS, INCORPORATED)

By:	4	<u> </u>
-	Committee	

Name Printed: ANDREW MILLEN

Title: CFO

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Schedule A – List of Patents

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Patent No.	App. No.	Filing Date	Title	Inventor(s)
			METHOD AND SYSTEM	DAVID F. SKOLL
US 6,768,102	09/594,169	June 15, 2000	FOR RECALIBRATION DURING MICRO-IMAGING TO DETERMINE THERMAL DRIFT	
US 6,763,140	09/657,164	September 7, 2000	METHOD AND APPARATUS FOR FOCUSING A MICRO- IMAGING SYSTEM ONTO A TILTED OR UNEVEN SAMPLE TO ACQUIRE IMAGES OF THE SAMPLE	DAVID F. SKOLL
US 6,684,379	09/927,551	August 13, 2001	DESIGN ANALYSIS WORKSTATION FOR ANALYZING INTEGRATED CIRCUITS	DAVID F. SKOLL; TERRY LUDLOW; JULIA ELVIDGE; MICHAEL PHANEUF
US 7,020,853	10/717,460	November 21, 2003	DESIGN ANALYSIS WORKSTATION FOR ANALYZING INTEGRATED CIRCUITS	DAVID F. SKOLL; TERRY LUDLOW; JULIA ELVIDGE
US 7,509,601	11/298,717	December 12, 2005	DESIGN ANALYSIS WORKSTATION FOR ANALYZING INTEGRATED CIRCUITS	DAVID F. SKOLL; TERRY LUDLOW; JULIA ELVIDGE
US 6,549,222	09/604,252	June 27, 2000	LOCK-STEP CURSORS FOR FEATURE ALIGNMENT	DAVID F. SKOLL
US 6,453,063	09/238,435	January 28, 1999	AUTOMATIC FOCUSED ION BEAM IMAGING SYSTEM AND METHOD	MICHAEL PHANEUF; DICK JAMES; JULIA ELVIDGE; PIERRETTE BRETON; TERRY LUDLOW; DAVID SKOLL; BRYAN SOCRANSKY; LOUISE WEAVER; RAY HAYTHORNTHWAITE
US 6,288,393	09/238,436	June 28, 1999	AUTOMATED METHOD OF CIRCUIT ANALYSIS	MICHAEL PHANEUF; DICK JAMES; PIERRETTE BRETON; JULIA ELVIDGE; RAY HAYTHORNTHWAITE
US 8,495,556	12/942,114	November 9, 2010	CIRCUIT VISUALIZATION USING FLIGHTLINES	MICHAEL GREEN
US 8,413,085			DIGITAL NETLIST PARTITIONING SYSTEM FOR FASTER CIRCUIT REVERSE-ENGINEERING	MICHAEL GREEN

Schedule A – List of Patents

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Patent No.	App. No.	Filing Date	Title	Inventor(s)
US 7,498,181	11/237966	2005-09-29	METHOD OF PREPARING	LEV KLIBANOV;
			AN INTEGRATED CIRCUIT	SHERRI LYNN
			DIE FOR IMAGING	GRIFFIN

Schedule B – Articles of Amalgamation

Ministry of Ĉintario : CERTIFICATE This is to certify that these

articles are offective on

Ministere des Government Gurvicus - Cúrvices gouvernemontreix

> CERTIFICAT Ceci centile que les prépants statuts entront on vigueur te

Ontario Corporation Number Numéro de la société en Ontario

FORESCHER Business Corporations Act / Lot our les cociétés par actions

Form 4 Business Corporations Act

Formule 4 Loi sur les sociétés par actions

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ARTICLES	OF AMAI	LGAMAT	'ION
STATUTS D	E FUSIO	N	

1. The name of the amalgamated corporation is: (Set out in BLOCK CAPITAL LETTERS) Dénomination sociale de la société issue de la fusion: (Écrire en LETTRES MAJUSCULES SEULEMENT)

Т	Ε	С	Η	I	N	S	1	G	H	T	S		Ī	N	С	· ·							
												,						5					

The address of the registered office is: Adresse du siège social :

3000 Solandt Road

Street & Number or R.R. Number & if Multi-Office Building give Room No. / Rue et numéro ou numéro de la R.R. et, s'il s'agit d'un édifice à bureaux, numéro du bureau

	Ottawa	ONTARI	o K 2 K 2 X 2
	Name of Municipality or Post Office / Nom de la municipalité ou du bureau	de posie	Postal Code/Code postal
3.	Number of directors is: Nombre d'administrateurs :	Fixed number OR minimum and maximum Nombre fixe OU minimum et maximum	1 1 10
4.	The director(s) is/are: / Administr	eteur(s) :	

First name, middle names and surname Prénom, autres prénoms et nom de famille	Address for service, giving Street & No. or R.R. No., Municipality, Province, Country and Postal Code Domicile élu, y compris la rue et le numéro ou le numéro de la R.R., le	Resident Canadian State 'Yes' or 'No' Résident canadien
John Day	5 Orchard Farm Road Port Washington NY 11050	No
John Kumhyr	3000 Solandt Road Ottawa ON K2K 2X2	Yes
Michael McLean	3000 Solandt Road Ottawa ON K2K 2X2	Yes

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4. The director(s) is/are: Administrateur(s):

First name, middle names and surname Prénom, autres prénoms et nom de famille	Address for services, giving street & No. or R.R. No., Municipality, Province, Country and Postal code. Domicile élu, y compris la rue et le numéro ou le numéro de la R.R., le nom de le municipalité, la province, le pays et le code postal	Resident Canadian State 'Yes' or 'No' Résident canadien Oui/Non
Andrew Millen	3000 Solandt Road Ottawa ON K2K 2X2	Yes

A.L	Amalgamation Agreement / Conventi	on de fusion :			
	The amelgamation agreement has been duly adopted by the shareholders of each of the amalgamating corporations as required by subsection 176 (4) of the Business Corporations Act on the date set out below. Les actionnaires de chaque société qui fusionnne ont dûment adopté la convention de fusion conformément				
innered					
or au paragraphe 176(4) de la Loi sur les sociétés par actions à la date mentionnée ci-dessous. ou					
8 -	Amaigamation of a holding corpora subsidiaries / Fusion d'une société n	nère avec une ou plusieurs de ses fili	ales ou fusion de filiales :		
X	The amalgamation has been approved required by section 177 of the Business Les administrateurs de chaque société	Corporations Act on the date set out be	elow.		
	conformément à l'article 177 de la Loi s				
	The articles of amalgamation in substar Les statuts de fusion reprennent essent				
•	TECHINSIGHTS INC.				
S. S	and are more particularly set out in thes et sont énoncés textuellement aux prés				
1777. seessaalika kiristee		3	Date of Adoption/Approval		
	elgamating corporations n sociale des sociétés qui fusionnent	Ontario Corporation Number Numéro de la société en Ontario	Date d'adoption ou d'approba Year Month Day année mois jour		
TECHINS	IGHTS INC.	001745423	2016-12-14		
CHIDW(N)	er sance	001959387	2016-12-14		
CHIPWORKS INC.		001/3/30/	2/01/01/2015		

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7. The classes and Catégories et not	any maximum number o nbre maximal, s'il y a lle:	f shares that the corpo u, d'actions que la soc	pration is authorized to dété est autorisée à én	issue: nettre :	
	any maximum number o nbre maximal, s'il y a lie: number of Comm		oration is authorized to Jiété est autorisée à én	issue: neitre :	
			oration is authorized to sièté est autorisée à én	issue: nettre :	
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			oration is authorized to riété est autorisée à én	issue: neitre :	
			oration is authorized to Jété est autorisée à én	issue: neitre :	

Restrictions, if any, on business the corporation may carry on or on powers the corporation may exercise.
 Limites, s'il y a lieu, imposées aux activités commerciales ou aux pouvoirs de la société.

- 8. Rights, privileges, restrictions and conditions (if any) attaching to each class of shares and directors authority with respect to any class of shares which may be issued in series:
 - Droits, privilèges, restrictions et conditions, s'il y a lieu, rattachés à chaque catégorie d'actions et pouvoirs des administrateurs relatifs à chaque catégorie d'actions qui peut être émise en sêrie :

The Common Shares shall have attached thereto the following rights, privileges, restrictions and conditions:

- (a) the holders of the Common Shares shall be entitled to receive any dividend declared by the directors on the Common Shares;
- (b) subject to the rights of the holders of shares ranking prior to or on a parity with the Common Shares, the holders of the Common Shares shall be entitled to receive the remaining property of the Corporation in the event of any liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary, or other distribution of assets of the Corporation among its shareholders for the purpose of winding up its affairs; and
- (c) the holders of the Common Shares shall be entitled to receive notice of and to attend and shall be entitled to one (1) vote at any meeting of the shareholders of the Corporation for each Common Share held, except meetings at which only holders of a specified class of shares are entitled to vote.

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The issue, transfer or ownership of shares is/is not restricted and the restrictions (if any) are as follows: L'émission, le transfert ou la propriété d'actions est/n'est pas restreint. Les restrictions, s'il y a lieu, sont les suivantes : N/A 10. Other provisions, (if any): Autres dispositions, s'il y a lieu : See page 5A.

11. The statements required by subsection 178(2) of the Business Corporations Act are attached as Schedule "A".
Les déclarations exigées aux termes du paragraphe 178(2) de la Loi sur les sociétés par actions constituent l'annexe A.

12. A copy of the amalgamation agreement or directors' resolutions (as the case may be) is/are attached as Schedule "B". Une copie de la convention de fusion ou les résolutions des administrateurs (selon le cas) constitue(nt) l'annexe B.

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10. Other provisions, (if any): Autres dispositions, s'il y a lieu :

- (a) the board of directors may from time to time, without authorization of the shareholders, in such amounts and on such terms as it deems expedient:
 - (i) borrow money on the credit of the Corporation;
 - issue, reissue, sell or pledge debt obligations (secured or unsecured) of the Corporation;
 - (iii) give a guarantee on behalf of the Corporation to secure performance of an obligation of any person or body corporate; and
 - (iv) charge, mortgage, hypothecate, pledge, cede and transfer or otherwise create a security interest in all or any of the currently owned or subsequently acquired real or personal, movable or immovable, property of the Corporation, including book debts, rights, powers, franchises and undertaking, to secure any debt obligations or any money borrowed, or other debt or liability of the Corporation.
- (b) the board of directors may from time to time delegate to such one or more directors and officers of the Corporation as may be designated by the board all or any of the powers conferred on the board pursuant to paragraph (a) above to such extent and in such manner as the board of directors shall determine at the time of each such delegation.
- (c) subject to the Business Corporations Act, the Corporation has a lien on a share registered in the name of a shareholder or the shareholder's personal representative for a debt of that shareholder to the Corporation including an amount unpaid in respect of a share issued by a body corporate on the date it was continued under the Business Corporations Act.

These articles are signed in duplicate. Les présents statuts sont signés en double exemplaire.

Name and original signature of a director or authorized signing officer of each of the amalgamating corporations. Include the name of each corporation, the signatories name and description of office (e.g. president, secretary). Only a director or authorized signing officer can sign on behalf of the corporation. I Nom et signature originale d'un administrateur ou d'un signataire autorisé de chaque société qui fusionne. Indiquer la dénomination sociale de chaque société, le nom du signataire et sa fonction (p. ex. : président, secrétaire). Seul un administrateur ou un dirigeant habilité peut signer au nom de la société.

TECHINSIGHTS INC.		
Names of Corporations / Dénomination By / Par	sociale des sociétés	
	Andrew Millen	Director
Signature Signature	Print name of signatory / Nom du signataire en lettres moulées	Description of Office / Fonction
CHIPWORKS INC.		
Names of Corporations / Denomination By / Par	sociale des sociétés	
	Andrew Millen	Director
Signatule / Signature	Print name of signatory / Nom du signataire en lettres moulées	Description of Office / Fonction
Names of Corporations / Dénomination By / Par	sociale des sociétés	
Signature / Signature	Print name of signatory / Nom du signataire en lettres moulées	Description of Office / Fonction
Names of Corporations / Denomination By / Par	n sociale des sociétés	
Signature / Signature	Print name of signatory / Nom du signataire en lettres moulées	Description of Office / Fonction
Names of Corporations / Denomination By / Par	n sociale des sociétés	
Signature i Signature	Print name of signatory / Nom du signatory an lattres regulâes	Description of Office / Fonction

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