PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3159004

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
RICHARD TUCKER	12/11/2014
HENRIK RYDGARD	05/27/2010
GHEORGHE POSTELNICU	05/27/2010
JASMINE KENT	12/12/2014
MICHELE COVELL	12/11/2014
SERGEY IOFFE	12/11/2014

RECEIVING PARTY DATA

Name:	GOOGLE INC.
Street Address:	1600 AMPHITHEATRE PARKWAY, BLDG. 41
City:	MOUNTAIN VIEW
State/Country:	CALIFORNIA
Postal Code:	94043

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12963901

CORRESPONDENCE DATA

Fax Number: (650)938-5200

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: 6503357160

Email: dchevalier@fenwick.com ANDREW P. WHITEHEAD Correspondent Name: Address Line 1: **801 CALIFORNIA STREET**

Address Line 4: MOUNTAIN VIEW, CALIFORNIA 94041

ATTORNEY DOCKET NUMBER:	24207-17756
NAME OF SUBMITTER:	ANDREW P. WHITEHEAD
SIGNATURE:	/Andrew P. Whitehead/
DATE SIGNED:	12/22/2014

Total Attachments: 7

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REEL: 034570 FRAME: 0104 503112397

PATENT



PATENT REEL: 034570 FRAME: 0105

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, the person(s) named below (referred to as "INVENTOR" whether singular or plural) has sold, assigned, and transferred and does hereby sell, assign, and transfer to Google Inc., a Delaware Corporation, having a place of business at 1600 Amphitheatre Parkway, Building 41, Mountain View, CA 94043 ("ASSIGNEE"), for itself and its successors, transferees, and assignees, the following:

- 1. The entire worldwide right, title, and interest in all inventions and improvements ("SUBJECT MATTER") that are disclosed in the following provisional or non-provisional application filed under 35 U.S.C. § 111, design application filed under 35 U.S.C. § 171, international application filed according to the Patent Cooperation Treaty (PCT), or U.S. national phase application filed under 35 U.S.C. § 371 ("APPLICATION"):
 - Application No. 12/963,901, entitled "Fingerprinting To Match Videos Having Varying Aspect Ratios," filed on December 9, 2010, which claims priority from a provisional application, filed on January 26, 2010, now bearing U.S. Application No. 61/298,544.
- 2. The entire worldwide right, title, and interest in and to:
 (a) the APPLICATION; (b) all applications claiming priority from the APPLICATION;
 (c) all provisional, utility, divisional, continuation, substitute, renewal, reissue, and other applications related thereto that have been or may be filed in the United States or elsewhere in the world; (d) all patents (including reissues and re-examinations) that may be granted on the applications set forth in (a), (b), and (c) above; and (e) all right of priority in the APPLICATION and in any underlying provisional or foreign application, together with all rights to recover damages for infringement of provisional rights.

INVENTOR agrees that ASSIGNEE may apply for and receive patents for SUBJECT MATTER in ASSIGNEE's own name.

INVENTOR agrees to do the following, when requested, and without further consideration, in order to carry out the intent of this Assignment: (1) execute all oaths, assignments, powers of attorney, applications, and other papers necessary or desirable to fully secure to ASSIGNEE the rights, titles and interests herein conveyed; (2) communicate to ASSIGNEE all known facts relating to the SUBJECT MATTER; and (3) generally do all lawful acts that ASSIGNEE shall consider desirable for securing, maintaining, and enforcing worldwide patent protection relating to the SUBJECT MATTER and for vesting in ASSIGNEE the rights, titles, and interests herein conveyed. INVENTOR further agrees to provide any successor, assign, or legal representative of ASSIGNEE with the benefits and assistance provided to ASSIGNEE hereunder.

INVENTOR represents that INVENTOR has the rights, titles, and interests to convey as set forth herein, and covenants with ASSIGNEE that the INVENTOR has not made and will not

1 of 3

24207/17756/DOCS/3557115.1

Title:	Fingerprinting To Match Videos Having Varying Aspect Ratios		
Filed:	December 9, 2010	Attorney Docket #:	24207-17756
Application #:	12/963,901		GP-1101-95-US

hereafter make any assignment, grant, mortgage, license, or other agreement affecting the rights, titles, and interests herein conveyed.

INVENTOR grants the attorney of record the power to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office or other authority for recordation of this document.

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original and all of which may be taken together as one and the same Assignment.

By signing below, INVENTOR further attests to the following:

- The APPLICATION was made or authorized to be made by INVENTOR.
- INVENTOR believes that INVENTOR is the original inventor or an original joint inventor of a claimed invention in the APPLICATION.

INVENTOR hereby acknowledges that any willful false statement made in this document is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

	Name and Signature	Date of Signature
Signature:	Richard Turker (Dec 11, 2014)	
Email:	richardt@google.com	December 11, 2014
	Richard Tucker	
	Name and Signature	Date of Signature
Signature:		
Email:	hrydgard@google.com	
	Henrik Rydgard	
	Name and Signature	Date of Signature
Signatur	re:	
Ema	il: gheorghe@google.com	
	Gheorghe M. Postelnicu	

2 of 3

Title:	Fingerprinting To Match Videos Having Varying Aspect Ratios		
Filed:	December 9, 2010	Attorney Docket #:	24207-17756
Application #:	12/963,901		GP-1101 - 95-US

Name and Signature	Date of Signature
Signature: Justine Kent (Dec 12, 2014)	
Email: libra@google.com	December 12, 2014
Jasmine Kent	
Name and Signature	Date of Signature
Signature: Michele Covell (Dec 11, 2014)	
Email: covell@google.com	December 11, 2014
Michele Covell	
Name and Signature	Date of Signature
Signature: sergey ioffe (Dec 11, 2014)	
Email: sioffe@google.com	December 11, 2014
Sergey Ioffe	

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, the person(s) named below (referred to as "INVENTOR" whether singular or plural) has sold, assigned, and transferred and does hereby sell, assign, and transfer to **Google Inc.**, a Delaware corporation, having a place of business at 1600 Amphitheatre Parkway, Building 41, Mountain View, California 94043, ("ASSIGNEE"), for itself and its successors, transferees, and assignees, the following:

- 1. The entire worldwide right, title, and interest in all inventions and improvements ("SUBJECT MATTER") that are disclosed in the following provisional application filed under 35 U.S.C. § 111(b), non-provisional application filed under 35 U.S.C. § 111(a), international application filed according to the Patent Cooperation Treaty (PCT), or U.S. national phase application filed under 35 U.S.C. § 371 ("APPLICATION") entitled "Fingerprinting To Match Videos Having Varying Aspect Ratios":
 - Application No. 61/298,544, filed on January 26, 2010.
 - 2. The entire worldwide right, title, and interest in and to:
- (a) the APPLICATION; (b) all applications claiming priority from the APPLICATION; (c) all provisional, utility, divisional, continuation, substitute, renewal, reissue, and other applications related thereto which have been or may be filed in the United States or elsewhere in the world; (d) all patents (including reissues and re-examinations) which may be granted on the applications set forth in (a), (b), and (c) above; and (e) all right of priority in the APPLICATION and in any underlying provisional or foreign application, together with all rights to recover damages for infringement of provisional rights.

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INVENTOR represents that INVENTOR has the rights, titles, and interests to convey as set forth herein, and covenants with ASSIGNEE that the INVENTOR has not made and will not hereafter make any assignment, grant, mortgage, license, or other agreement affecting the rights, titles, and interests herein conveyed.

24207/16316/DOCS/2223195.1

Title:	

Fingerprinting to Match Videos Having Varying Aspect Ratios

Filed: Application No.:

January 26, 2010 61/298,544

INVENTOR grants the attorney of record the power to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original and all of which may be taken together as one and the same Assignment.

Name and Signature	Date of Signature
Richard Tucker	May 27, 2010
Name and Signature Henrik Rydgard	Date of Signature May 27, 2010
Name and Signature Mina of Signature Gheorghe Postelnicu	Date of Signature May 27, 2010
Name and Signature Slave Market Signature Jasmine Langlidge	Date of Signature May 27, 2010
Name and Signature	Date of Signature
Michele Covell	, 2010
Name and Signature	Date of Signature
Sergey Loffe	, 2010

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Fingerprinting to Match Videos Having Varying Aspect Ratios

Filed:
Application No.:

January 26, 2010 61/298,544

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Name and Signature	Date of Signature	
	, 2010	
Richard Tucker		
Name and Signature	Date of Signature	
Henrik Rydgard	, 2010	
Home Ryagaia		
Name and Signature	Date of Signature	
Gheorghe Postelnicu	, 2010	
Name and Signature	Date of Signature	
Jasmine Langridge	, 2010	
Name and Signature	Date of Signature	
Michele Covell	April 8, 2010	
Name and Signature	Date of Signature	
Sergey Ioffe	, 2010	

Title:	
Filed:	

Fingerprinting to Match Videos Having Varying Aspect Ratios

January 26, 2010 61/298,544

Application No.:

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Name and Signature	Date of Signature
	, 2010
Jasmine Langridge	
Name and Signature	Date of Signature
	, 2010
Michele Covell	
Name and Signature	Date of Signature
Sexa	Myy 13,2010
Sergey Ioffe	

24207/16316/DOCS/2223195.1

RECORDED: 12/22/2014