#### 11/11/2014 503056519

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3103120

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
FASTFORWARD NETWORKS, INC.	05/02/2006

#### **RECEIVING PARTY DATA**

Name:	YAHOO! INC.		
Street Address:	701 FIRST AVENUE		
City:	SUNNYVALE		
State/Country:	CALIFORNIA		
Postal Code:	94089		

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	13758608

#### **CORRESPONDENCE DATA**

Fax Number: (877)769-7945

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: (214) 747-5070 Email: apsi@fr.com **Correspondent Name: DAN SMITH** 

Address Line 1: FISH & RICHARDSON P.C.

Address Line 2: P.O.BOX 1022

Address Line 4: MINNEAPOLIS, MINNESOTA 55440-1022

ATTORNEY DOCKET NUMBER:	16113-6724006
NAME OF SUBMITTER:	CATIE JACKSON
SIGNATURE:	/Catie Jackson/
DATE SIGNED:	11/11/2014

#### **Total Attachments: 7**

source=Fastforward to Yahoo#page1.tif source=Fastforward to Yahoo#page2.tif source=Fastforward to Yahoo#page3.tif source=Fastforward to Yahoo#page4.tif source=Fastforward to Yahoo#page5.tif source=Fastforward to Yahoo#page6.tif

> PATENT **REEL: 034146 FRAME: 0289** 503056519

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PATENT REEL: 034146 FRAME: 0290

#### **NOTARIAL CERTIFICATION OF ASSIGNMENT**

I, John G. Rauch, do hereby certify that:

1) the attached is a true copy of the fully executed Assignment, dated May 2, 2006, that evidences the transfer of the entire ownership interest in worldwide rights for the patent assets identified in Exhibit 1 entitled "PATENTS AND PATENT APPLICATIONS" from:

FASTFORWARD NETWORKS, INC. to YAHOO! INC.

IN WITNESS WHEREOF, I have executed this certificate of assignment on behalf of Yahoo! Inc., on June 15, 2007.

John G. Rauch

#### **NOTARY ACKNOWLEDGEMENT**

This instrument was acknowledged before me in Cook County, Illinois, U.S.A., on June 15, 2007,

by <u>Brenda S. Skinner</u>, a Notary Public.

Print Name Here

"OFFICIAL SEAL"
BRENDA S. SKINNER
NOTARY PUBLIC, STATE OF ILLINOIS
My Commission Expires 03-27-2011

Notari Bublio

PATENT REEL: 034146 FRAME: 0291

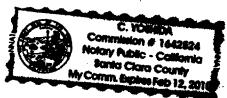
### PATENT ASSIGNMENT

This patent assignment agreement ("Agreement") is entered into by and between Fastforward Networks, Inc. ("Seller"), a Delaware Corporation having an address 701 First Avenue, Sunnyvale, CA, 94089, and Yahoo! Inc. ("Yahoo!"), a Delaware corporation having an address at 701 First Avenue, Sunnyvale, CA 94089.

For good and valuable consideration, the receipt of which is hereby acknowledged, Seller hereby:

- irrevocably assigns to Yahoo!:
  - the entire right, title and interest, everywhere in the world to
    - the issued patents and/or patent applications set forth on Exhibit 1, (a)
    - (b) any patent applications and/or patents which may claim priority of the items in (a) (including but not limited to continuations, divisions, continuations-in-part, substitutes, reissues, reexaminations or extensions thereof, together with all priority rights and counterpart applications under any existing or future international patent conventions, agreements or treaties),
    - (c) any patent that may be granted on any patent application in (a) or (b), and
    - (d) any other rights in the inventions described in any of (a), (b) or (c); (all of the foregoing in (1), collectively, the "Assigned Patents");
  - the right to sue third parties for infringement (including but not limited to damages and (2)injunctive relief) of any of the foregoing in (1) accruing based on activities occurring prior to the execution date hereof; and
  - any current or future right to receive royalties based on any of the foregoing in (1) or (2); (3) (all of the foregoing in (A), collectively, the "Assigned Rights"); and
- (B) agrees upon request (and at the expense) of Yahoo! (or its successors, assigns or legal representatives) to, and if Seller is unable or unwilling to do so authorizes Yahoo! to act in Seller's name to:
  - (1)execute all oaths, assignments, powers and any other papers;
  - (2)testify in any proceeding; and
  - (3)otherwise take any action, and fully cooperate with Yahoo!;
- in each case, related to securing and enforcing Yahoo!'s rights related to this Agreement; and agrees to deliver to Yahoo! accurate copies of all material correspondence with counsel, in Seller's or (C) its counsel's possession, relating to ownership, filing, prosecution, infringement, validity, or enforceability of, the Assigned Patents, to the extent such has not already been delivered.

For Seller by:	Notary Seal: State of California Co
Mysel	Subscribed and sworn to
Signature ' Michael Callahan	Before me on this 7 day of MICHAEL CAL
Name 5-2-06	personally known to me or pr the basis of satisfactory evid
Date	Signature Www.
For Yahoo! Inc. by:	Notary Seal:
Signature // Signa	_
Name S/2/2006	<del>-</del>
Date	



**PATENT** 

REEL: 034146 FRAME: 0292

# EXHIBIT 1 – PATENTS AND PATENT APPLICATIONS

Application	Patent	Date	Date	Country	Title	Inventors
Number	Number	Filed	Issued			
986628.6		19-Dec-00		EP	A Content Distribution System for Operation Over an Internetwork Including Content Peering Arrangements	Steven McCanne
60/172,746		20-Dec-99		US	Content Distribution System for Operations Over an Internetwork Including Content Peering Arrangement	Steven McCanhe
09/609,442	6785704	03-Jul-00	31-Aug-04	US	A Content Distribution System for Operation Over an Internetwork Including Content Peering Arrangements	Steven McCanne
10/912,840		04-Aug-04		US	A Content Distribution System for Operation Over an Internetwork Including Content Peering Arrangements	Steven McCanne
00/34675		19-Dec-00		WO	A Content Distribution System for Operation Over an Internetwork Including Content Peering Arrangements	McCanne, Steven
941222.2		01-Jun-00		EP	Method and Device for Bandwidth Allocation	Abhay Parekh, Steven McCanne, William Welch
2001-500502		01-Jun-00		JP	Method and Device for Bandwidth Allocation	Abhay Parekh, Steven McCanne, William Welch
2001-7015489		01-Jun-00		KR	Method and Device for Bandwidth Allocation	Abhay Parekh, Steven McCanne, William Welch
60/137,160		01-Jun-99		US	System for Bandwidth Allocation in a Computer Network	Steven McCanne
09/384,865	6735633	27-Aug-99	11-May-04	US	Method and Device for Bandwidth Allocation	Abhay Parekh, Steven McCanne, William Welch
10/767,227		28-Jan-04	<u>-</u>	US	System for Bandwidth Allocation in a Computer Network	Abhay Parekh, Steven McCanne, William Welch

Application Number	Patent Number	Date Filed	Date Issued	Country	Title	Inventors
00/15415	Number	01-Jun-00	Issueu	wo	Method and Device for Bandwidth Allocation	Abhay Parekh, Steven McCanne, William Welch
938128.6	DE60008102T2	01-Jun-00	04-Feb-04	DE	Method and Device for Multicasting	Andrew Swan, Steven McCanne
938128.6	1183820	01-Jun-00	04-Feb-04	EP	Method and Device for Multicasting	Andrew Swan, Steven McCanne
00/15417		01-Jun-00		FR	Method and Device for Multicasting	Andrew Swan, Steven McCanne
00/15417		01-Jun-00		GB	Method and Device for Multicasting	Andrew Swan, Steven McCanne
2001-500493	·	01-Jun-00		JP	Method and Device for Multicasting	Abhay Parekh, Steven McCanne, William Welch
2001-7015487		. 01-Jun-00		KR	Method and Device for Multicasting	Andrew Swan, Steven McCanne
60/137,153		01-Jun-99		US	System for Multipoint Infrastructure Transport in a Computer Network	Steven McCanne
09/412,815	6850987	05-Oct-99	01-Feb-05	US	System for Multipoint Infrastructure Transport in a Computer Network	Andrew Swan, Steven McCanne
10/618,369	·	10-Jul-03		US	System for Multipoint Infrastructure Transport in a Computer Network	Andrew Swan, Steven McCanne
00/15417		01-Jun-00	-	wo	Method and Device for Multicasting	Andrew Swan, Steven McCanne
60/115,454		11-Jan-99		US	System for Providing Application-Level Features to Multicast Routing in Computer Networks	Steven McCanne

Application	Patent	Date	Date	Country	Title	. Inventors
Number	Number	Filed	Issued			
09/323,869	6611872	01-Jun-99	22-Aug-00	US	Performing Multicast Communication in Computer Networks by Using Overlay Routing	Steven McCanne
10/299,676		18-Nov-02		US	Performing Multicase Communication in Computer Networks by Using Overlay Routing	Steven McCanne
10/600,142		19-Jun-03		US	Performing Multicase Communication in Computer Networks by Using Overlay Routing	Steven McCanne
73415/00	771353	01-Sep-00	01-Jul-04	AU	Proximity-Based Redirection System for Robust and Scalable Service-Node Location in an Internetwork	Steven McCanne, William Destein
961467.8		01-Sep-00		EP	Proximity-Based Redirection System for Robust & Scalable Service-Node Location in an Internetwork	Steven McCanne William Destein
2001-522165		01-Sep-00		JP	Proximity-Based Redirection System for Robust & Scalable Service-Node Location in an Internetwork	Steven McCanne William Destein
2002-7002895		01-Sep-00		KR	Proximity-Based Redirection System for Robust & Scalable Service-Node Location in an Internetwork	Steven McCanne William Destein
60/152,257		03-Sep-99		US	Proximity-Based Redirection System for Robust & Scalable Service-Nose Location in an Internetwork	Steven McCanne William Destein
09/458,216	6415323	09-Dec-99	02-Jul-02	US	Proximity-Based Redirection System for Robust and Scalable Service-Node Location in an Internetwork	Steven McCanne William Destein
10/188,350	6901445	01-Jul-02	`31-May-05	US	Proximity-Based Redirection System for Robust and Scalable Service-Node Location in an Internetwork	Steven McCanne William Destein

Application Number	Patent Number	Date Filed	Date Issued	Country	Title	Inventors
00/24047		01-Sep-00		wo	Proximity-Based Redirection System for Robust & Scalable Service-Node Location in an Internetwork	Steven McCanne, William Destein
60/217,250		10-Jul-00		US	Scalable & Programmable Query Distribution & Collection in a Network of Queryable Devices	Kevin Lang, Matthew Podolsky, Nicholar Thompson, Steven McCanne, William Welch
09/900,704	6826564	06-Jul-01	30-Nov-04	US	Scalable and Programmable Query Distribution and Collection in a Network of Queryable Devices	Kevin Lang, Matthew Podolsky, Nicholas Thompson, Steven McCanne, William Welch
01/21938		10-Jul-01		wo	Scalable & Programmable Query Distribution & Collection in a Network of Queryable Devices	Kevin Lang, Matthew Podolsky, Nicholas Thompson, Steven McCanne, William Welch
Publication # WO 02/005141		-		wo	Network management arrangement with query aggregation	

## CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California  County of Santa Clara	} ss.
On <u>May 2, 2006</u> , before me, <u>Cl</u> personally appeared <u>Joseph Si</u>	are Calaprice Finney Notary, Name and Alle of Officer (e.g., "Jane Doe, Notary Public") Name(s) of Signer(s)
	☐ proved to me on the basis of satisfactory evidence
\	Name(s) of Signer(s)  Department personally known to me  □ proved to me on the basis of satisfactory evidence  to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
CLARE CALAPRICE FINNEY COMM. # 1411280 COMM. # 1411280 COMM. # 1411280 COMM. EXP. APRIL 15, 2007	the entity upon behalf of which the person(s) acted, executed the instrument.  WITNESS my hand and official seal.
Place Notary Seal Above	Clare Calapurce Finns Signature of Notary Public
and could prevent fraudulent removal and	it may prove valuable to persons relying on the document reattachment of this form to another document.
Title or Type of Document: <u>Fatent</u> Document Date: <u>May 2,2006</u>	Assignment-Fast-forward Network
Signer(s) Other Than Named Above:	
Capacity(ies) Claimed by Signer Signer's Name:	dent, Intellectual Property Top of thumb hore
□ Guardian or Conservator □ Other: □ Signer Is Representing:	

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