

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3116699

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Steven McCanne	08/24/1999
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	FASTFORWARD NETWORKS, INC.
<b>Street Address:</b>	75 HAWTHORNE STREET
<b>Internal Address:</b>	SUITE 601
<b>City:</b>	SAN FRANCISCO
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94105
<b>PROPERTY NUMBERS Total: 5</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	10299676
Application Number:	10600142
Application Number:	12426185
Application Number:	13758608
Application Number:	14140502
<b>CORRESPONDENCE DATA</b>	
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<i>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.</i>	
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<b>ATTORNEY DOCKET NUMBER:</b>	16113-6724002
<b>NAME OF SUBMITTER:</b>	CATIE JACKSON
<b>SIGNATURE:</b>	/Catie Jackson/
<b>DATE SIGNED:</b>	11/20/2014
<b>Total Attachments: 1</b>	

PATENT



SOLE

Title of Invention: PERFORMING MULTICAST COMMUNICATION IN  
COMPUTER NETWORKS BY USING OVERLAY  
ROUTING

Application No.: 09/323,869


For good and valuable consideration, receipt of which is hereby acknowledged by Assignor, Assignor has assigned, and by these presents does assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on any patent application claiming priority from the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignor had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignor further agrees that Assignor will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

Assignor hereby authorizes and requests Townsend and Townsend and Crew LLP, Two Embarcadero Center, 8<sup>th</sup> Floor, San Francisco, CA 94111-3834, to insert herein above the application number and filing date of said application when known.

IN TESTIMONY WHEREOF, Assignor has signed his/her name on the date indicated.

Dated: 8/24/99

  
Steven McCanne

RECORDED: 08/31/1999

PATENT  
REEL: 010203 FRAME: 0783

**RECORDED: 11/20/2014**

**PATENT**  
**REEL: 034220 FRAME: 0298**