

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT4325599

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
SANJAY KUMAR HOODA	02/28/2017
KAUSHIK KUMAR DAM	02/28/2017
SANDESH KUMAR NARAPPA BHEEMANAKONE	02/28/2017
VICTOR M. MORENO	03/16/2017
SHIVANGI SHARMA	02/28/2017
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	CISCO TECHNOLOGY, INC.
<b>Street Address:</b>	170 WEST TASMAN DRIVE
<b>City:</b>	SAN JOSE
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	95134-1706
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15446802
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(612)332-9081
<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>	
<b>Phone:</b>	404-954-5100
<b>Email:</b>	mbrami@merchantgould.com
<b>Correspondent Name:</b>	MERCHANT & GOULD P.C. CISCO TECHNOLOGY,
<b>Address Line 1:</b>	P.O. BOX 2903
<b>Address Line 4:</b>	MINNEAPOLIS, MINNESOTA 55402-0903
<b>ATTORNEY DOCKET NUMBER:</b>	60374.0901US01/1005839-US
<b>NAME OF SUBMITTER:</b>	D. KENT STIER
<b>SIGNATURE:</b>	/D. Kent Stier/
<b>DATE SIGNED:</b>	03/20/2017
<b>Total Attachments: 5</b>	
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**ASSIGNMENT**

WHEREAS, we, the undersigned inventor ("Assignor"), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made, said application having been executed on the date set forth below; and

WHEREAS, Cisco Technology, Inc., ("Assignee") a California corporation having an address of 170 West Tasman Drive, San Jose, California 95134-1706, desires to acquire all right, title, and interest in and to the invention, and in and to the said application and any Letters Patent that may issue thereon;

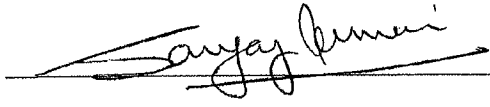
NOW, THEREFORE, for and in consideration of One United States Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we assign to Assignee, all right, title and interest in and to said invention and in and to said application and all patents which may be granted therefore, and all divisions, reissues, continuations, continuations-in-part and extensions thereof; and we hereby authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patents resulting therefrom, insofar as my interest is concerned, to Assignee.

We also assign to Assignee, all right title and interest to the invention disclosed in said application throughout the world, including the right to file applications and obtain patents, utility models, industrial models and designs for said invention in its own name throughout the world including all rights to publish cautionary notices reserving ownership of said invention and all rights to register said invention in appropriate registries; and we further agree to execute any and all powers of attorney, applications, assignments, declarations, affidavits, and any other papers in connection therewith necessary to perfect such right, title and interest in Assignee.

We will communicate to Assignee any facts known to me respecting any improvements; and, at the expense of Assignee, we will testify in any legal proceedings, sign all lawful papers execute all divisional, continuation, continuation-in-part, reissue and substitute applications, make lawful oaths and declarations, and generally do everything possible to vest title in Assignee and to aid Assignee to obtain and enforce proper protection for said invention in all countries.

This Assignment shall be binding on the parties' successors, assigns and legal representatives.

Title of the Invention: Group Based Multicast in Networks

Signature of Inventor: 

Inventor's Name: Sanjay Kumar Hooda

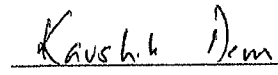
Residence (City, State): Pleasanton, California

Post Office Address: 5479 Sonoma Drive  
Pleasanton, California 94566 USA

Citizenship: US

Date: 2/28/2017

Title of the Invention: Group Based Multicast in Networks

Signature of Inventor: 

Inventor's Name: Kaushik Kumar Dam

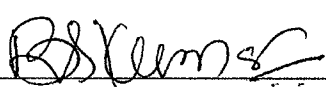
Residence (City, State): San Jose, California

Post Office Address: 2998 Delta Road  
San Jose, California 95135 USA

Citizenship: US

Date: 02/28/17

Title of the Invention: Group Based Multicast in Networks

Signature of Inventor: 

Inventor's Name: Sandesh Kumar Narappa Bheemanakone

Residence (City, State): Milpitas, California

Post Office Address: 1775 Milmont Drive, Apartment S302  
Milpitas, California 95035 USA

Citizenship: India

Date: 02/28/2017

Title of the Invention: Group Based Multicast in Networks

Signature of Inventor: \_\_\_\_\_

Inventor's Name: Victor M. Moreno

Residence (City, State): Carlsbad, California

Post Office Address: 5365 Los Robles Drive  
Carlsbad, California 92008 USA

Citizenship: US

Date: \_\_\_\_\_

Title of the Invention: Group Based Multicast in Networks

Signature of Inventor: \_\_\_\_\_

Inventor's Name: Sandesh Kumar Narappa Bheemanakone

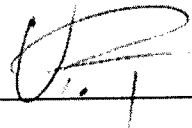
Residence (City, State): Milpitas, California

Post Office Address: 1775 Milmont Drive, Apartment S302  
Milpitas, California 95035 USA

Citizenship: India

Date: \_\_\_\_\_

Title of the Invention: Group Based Multicast in Networks

Signature of Inventor:  \_\_\_\_\_

Inventor's Name: Victor M. Moreno

Residence (City, State): Carlsbad, California

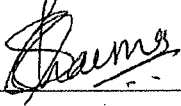
Post Office Address: 5365 Los Robles Drive  
Carlsbad, California 92008 USA

Citizenship: US

Date: 03/16/17

Docket No. 60374.0901US01/1005839-US.01

Title of the Invention: Group Based Multicast in Networks

Signature of Inventor: 

Inventor's Name: Shivangi Sharma

Residence (City, State): Los Gatos, California

Post Office Address: 130 Forest Hill Drive  
Los Gatos, California 95032 USA

Citizenship: ~~USA~~ India.

Date: 02/28/2017.