PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT7180717

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
GAUTHAM BHARADWAJ	12/27/2021
SUBRAMANYA BAYAR KRISHNA	12/28/2021
DEEPAK MANOHAR ARUR	12/28/2021
CHANNASANDRA RAVISHANKAR	12/27/2021
CHARLES A. BARNETT	12/28/2021

RECEIVING PARTY DATA

Name:	HUGHES NETWORK SYSTEMS, LLC	
Street Address:	11717 EXPLORATION LANE	
City:	GERMANTOWN	
State/Country:	MARYLAND	
Postal Code:	20876	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17563801

CORRESPONDENCE DATA

Fax Number: (703)865-5150

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: 703-652-3821

Email: ihebron@mannavakang.com MANNAVA & KANG, PC **Correspondent Name:** Address Line 1: 3201 JERMANTOWN ROAD

SUITE 525 Address Line 2:

Address Line 4: FAIRFAX, VIRGINIA 22030

ATTORNEY DOCKET NUMBER:	1120.008US1
NAME OF SUBMITTER:	GEORGE Y. WANG
SIGNATURE:	/George Y. Wang/
DATE SIGNED:	02/16/2022

Total Attachments: 5

PATENT REEL: 059028 FRAME: 0947

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PATENT REEL: 059028 FRAME: 0948

PATERI ASSIGNATERA		
Assignor(s):	Gautham BHARADWAJ	
Assignee:	Hughes Network Systems, LLC 11717 Exploration Lane Germantown, MD 20876	
Patent Applica	cation(s):	
Title:	HANDOVER REDUCTION IN SATELLITE COMMUNI	CATION SYSTEMS
	executed by the undersigned concurrently herew	/ith
	Application No(s): Fili	ng Date:
	ensideration of good and valuable consideration, theorem.	ne receipt of which is hereby acknowledged,
I/we, the above-named Assignors, hereby: sell, assign and transfer to the above-named Assignee (and its successors, assigns and legal representatives) the entire right, title and interest (for the United States and all foreign countries) in and to: (1) the above-identified patent application(s); and (2) all divisional, continuing, substitute, renewal, reissue and all other patent applications, which have been or are subsequently filed in the United States and any and all foreign countries, based on or claiming priority to the Application(s), or based on any of said improvements; and (3) all original and reissued patents that have been or are subsequently issued in the United States and any and all foreign countries from the Application(s) or based on any of said improvements; and (4) any and all rights of priority arising from the filing of the Application(s) in the United States and any and all foreign countries; and agree that the Assignee may apply for and receive a patent or patents from the Application(s) and for said improvements in its own name; and that, to carry out in good faith the intent and purpose of this Assignment, I/we (without charge to, but at the expense of the Assignee) shall: execute the Application(s), and all divisional, continuing, substitute, renewal, reissue and other patent applications based on or claiming priority to the Application(s), or based on any and all of said improvements, and execute all associated assignments and powers of attorney; convey to the Assignee (and its successors, assigns and legal representatives) all known facts relating to the Application(s) said improvements, and for vesting title in and to the Application(s), and all applications for patents and all patents on said improvements, in the Assignee (and its successors, assigns and legal representatives) that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the Assignor(s), and that full right to convey the same as herein		
Date:	12/27/2021	ampam

PATENT ASSIGNMENT

PATENT ASSIGNIVIENT		
Assignor(s):	Subramanya Bayar KRISHNA	
Assignee:	Hughes Network Systems, LLC 11717 Exploration Lane Germantown, MD 20876	
Patent Applica	ation(s):	
Title:	HANDOVER REDUCTION IN SATELLITE COMMUNICATION SYSTEMS	
\boxtimes	executed by the undersigned concurrently herewith	
	Application No(s): Filing Date:	
In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, I/we, the above-named Assignors, hereby:		

PATENT REEL: 059028 FRAME: 0950

12/28/2021

PATENT ASSIGNMENT

Assignor(s):	Deepak Manohar ARUR
Assignee:	Hughes Network Systems, LLC 11717 Exploration Lane Germantown, MD 20876
Patent Applic	ation(s):
Title:	HANDOVER REDUCTION IN SATELLITE COMMUNICATION SYSTEMS
\boxtimes	executed by the undersigned concurrently herewith
	Application No(s): Filing Date:
i/we, the abo sell, representativ	nsideration of good and valuable consideration, the receipt of which is hereby acknowledged, ve-named Assignors, hereby: assign and transfer to the above-named Assignee (and its successors, assigns and legal es) the entire right, title and interest (for the United States and all foreign countries) in and to: -identified patent application(s) ("the Application(s)"), including any and all improvements that
are disclosed patent applic countries, bar original and r foreign count priority arisin	in the Application(s); and (2) all divisional, continuing, substitute, renewal, reissue and all other ations, which have been or are subsequently filed in the United States and any and all foreign sed on or claiming priority to the Application(s), or based on any of said improvements; and (3) all eissued patents that have been or are subsequently issued in the United States and any and all ries from the Application(s) or based on any of said improvements; and (4) any and all rights of g from the filing of the Application(s) in the United States and any and all foreign countries; and
agree said improve Assignment, and all division priority to the assignments representative generally ass proper pater Application(s successors, a	that the Assignee may apply for and receive a patent or patents from the Application(s) and for ments in its own name; and that, to carry out in good faith the intent and purpose of this I/we (without charge to, but at the expense of the Assignee) shall: execute the Application(s), anal, continuing, substitute, renewal, reissue and other patent applications based on or claiming the Application(s), or based on any and all of said improvements, and execute all associated and powers of attorney; convey to the Assignee (and its successors, assigns and legal res) all known facts relating to the Application(s) said improvements and the history thereof; and its the Assignee (and its successors, assigns and legal representatives) in securing and maintaining an protection for the Application(s) and said improvements, and for vesting title in and to the land all applications for patents and all patents on said improvements, in the Assignee (and its ssigns and legal representatives); and
grant morte	nant with the Assignee (and its successors, assigns and legal representatives) that no assignment, age, license, or other agreement affecting the rights and property herein conveyed has been made the Assignor(s), and that full right to convey the same as herein expressed is possessed by the

PATENT REEL: 059028 FRAME: 0951

PATENT ASSIGNMENT

	s ms man monday and many many many many many many many many	
Assignor(s):	Channasandra RAVISHANKAR	
Assignee:	Hughes Network Systems, LLC 11717 Exploration Lane Germantown, MD 20876	
Patent Applica	ation(s):	
Title:	HANDOVER REDUCTION IN SATELLITE COMMUNICATION SYSTEMS	
\boxtimes	executed by the undersigned concurrently herewith	
	Application No(s): Filing Date:	
sell, a representative (1) the above-are disclosed i patent applica countries, base original and reforeign countries priority arising agree said improven	sideration of good and valuable consideration, the receipt of which is hereby acknowledged, re-named Assignors, hereby: assign and transfer to the above-named Assignee (and its successors, assigns and legal es) the entire right, title and interest (for the United States and all foreign countries) in and to: identified patent application(s) ("the Application(s)"), including any and all improvements that in the Application(s); and (2) all divisional, continuing, substitute, renewal, reissue and all other actions, which have been or are subsequently filed in the United States and any and all foreign ed on or claiming priority to the Application(s), or based on any of said improvements; and (3) all essued patents that have been or are subsequently issued in the United States and any and all rights of from the Application(s) or based on any of said improvements; and (4) any and all rights of from the filing of the Application(s) in the United States and any and all foreign countries; and that the Assignee may apply for and receive a patent or patents from the Application(s) and for ments in its own name; and that, to carry out in good faith the intent and purpose of this five (without charge to, but at the expense of the Assignee) shall: execute the Application(s),	
priority to the assignments a representative generally assis proper patent Application(s),	nal, continuing, substitute, renewal, reissue and other patent applications based on or claiming a Application(s), or based on any and all of said improvements, and execute all associated and powers of attorney; convey to the Assignee (and its successors, assigns and legal is) all known facts relating to the Application(s) said improvements and the history thereof; and the Assignee (and its successors, assigns and legal representatives) in securing and maintaining protection for the Application(s) and said improvements, and for vesting title in and to the and all applications for patents and all patents on said improvements, in the Assignee (and its signs and legal representatives); and	
covenant with the Assignee (and its successors, assigns and legal representatives) that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the Assignor(s), and that full right to convey the same as herein expressed is possessed by the Assignor(s).		

PATENT REEL: 059028 FRAME: 0952

<u>December 27, 20</u>21

PATENT ASSIGNMENT			
Assignor(s):	Charles A BARNETT		
Assignee:	Hughes Network Systems, LI 11717 Exploration Lane Germantown, MD 20876	LC	
Patent Applic	cation(s):		
Title:	HANDOVER REDUCTION IN S	SATELLITE COMMUNICATION SYSTEMS	
	executed by the undersigned concurrently herewith		
	Application No(s):	Filing Date:	
	nsideration of good and valua ove-named Assignors, hereby:	ble consideration, the receipt of which is hereby acknowledged,	
(1) the above are disclosed patent applic countries, bas original and r foreign count priority arisin	ves) the entire right, title and in e-identified patent application(s) in the Application(s); and (2) a cations, which have been or ar- sed on or claiming priority to the reissued patents that have bee tries from the Application(s) or ng from the filing of the Applica	above-named Assignee (and its successors, assigns and legal interest (for the United States and all foreign countries) in and to: s) ("the Application(s)"), including any and all improvements that all divisional, continuing, substitute, renewal, reissue and all other re-subsequently filed in the United States and any and all foreign the Application(s), or based on any of said improvements; and (3) all in or are subsequently issued in the United States and any and all based on any of said improvements; and (4) any and all rights of attion(s) in the United States and any and all foreign countries; and for and receive a patent or patents from the Application(s) and for	
said improve Assignment,	ments in its own name; and I/we (without charge to, but a	that, to carry out in good faith the intent and purpose of this it the expense of the Assignee) shall: execute the Application(s), newal, reissue and other patent applications based on or claiming	

priority to the Application(s), or based on any and all of said improvements, and execute all associated assignments and powers of attorney; convey to the Assignee (and its successors, assigns and legal representatives) all known facts relating to the Application(s) said improvements and the history thereof; and generally assist the Assignee (and its successors, assigns and legal representatives) in securing and maintaining proper patent protection for the Application(s) and said improvements, and for vesting title in and to the Application(s), and all applications for patents and all patents on said improvements, in the Assignee (and its successors, assigns and legal representatives); and

covenant with the Assignee (and its successors, assigns and legal representatives) that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the Assignor(s), and that full right to convey the same as herein expressed is possessed by the Assignor(s).

RECORDED: 02/16/2022

PATENT

REEL: 059028 FRAME: 0953

Page 1 of 1