506601685 04/09/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6648490

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
AHMED OMAR DESOUKY ALI	02/06/2021
BRIAN CLARKE BANISTER	01/25/2021
SUPRATIK BHATTACHARJEE	01/27/2021
UDAYAN MURLI BHAWNANI	04/08/2021
JITTRA JOOTAR	04/01/2021
TIMOTHY PAUL PALS	01/21/2021
REBECCA WEN-LING YUAN	01/24/2021
ARVIND VARDARAJAN SANTHANAM	01/26/2021
ZHIBIN DANG	01/22/2021
OMESH KUMAR HANDA	01/26/2021
SIBASISH DAS	04/05/2021
CHETAN JAGDEESH BHARADWAJ	01/27/2021
GAUTHAM HARIHARAN	02/03/2021
MIN WANG	01/05/2021
FARRUKH RASHID	01/05/2021
NAN ZHANG	01/04/2021
SUMANTH KUMAR KOTA	01/06/2021

RECEIVING PARTY DATA

Name:	QUALCOMM INCORPORATED
Street Address:	5775 MOREHOUSE DRIVE
City:	SAN DIEGO
State/Country:	CALIFORNIA
Postal Code:	92121-1714

PROPERTY NUMBERS Total: 2

Property Type	Number
Application Number:	17108667
Application Number:	62946126

CORRESPONDENCE DATA

PATENT REEL: 055875 FRAME: 0839

506601685

Fax Number: (303)473-2720

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: 3034732700

Email: eajuntunen@hollandhart.com

Correspondent Name: MICHAEL DRAPKIN Address Line 1: P.O. BOX 11583

Address Line 4: SALT LAKE CITY, UTAH 84147

ATTORNEY DOCKET NUMBER:	PR831.01 (103038.2358)
NAME OF SUBMITTER:	MICHAEL L. DRAPKIN
SIGNATURE:	/Michael L. Drapkin/
DATE SIGNED:	04/09/2021

Total Attachments: 20

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ASSIGNMENT

WHEREAS, WE,

- Ahmed Omar Desouky ALI, having a mailing address located at 5775 Morehouse Drive, 1. San Diego, CA 92121,
- 2. Brian Clarke BANISTER, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121,
- Supratik BHATTACHARJEE, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121,
- 4. Udayan Murli BHAWNANI, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121,
- 5. Jittra JOOTAR, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121.
- Timothy Paul PALS, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121,
- Rebecca Wen-Ling YUAN, having a mailing address located at 5775 Morehouse Drive, 7. San Diego, CA 92121,
- 8. Arvind Vardarajan SANTHANAM, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121,
- 9. Zhibin DANG, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121,
- Omesh Kumar HANDA, having a mailing address located at 5775 Morehouse Drive, San 10. Diego, CA 92121,
- 11. Sibasish DAS, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121.

PATENT

REEL: 055875 FRAME: 0841

- 12. Chetan Jagdeesh BHARADWAJ, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121,
- 13. Gautham HARIHARAN, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121,
- 14. Min WANG, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121,
- 15. Farrukh RASHID, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121,
- 16. Nan ZHANG, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121.
- 17. Sumanth Kumar KOTA, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121,

have conceived of one or more processes, methods, machines, articles of manufacture, designs, compositions of matter, inventions, discoveries or new or useful improvements relating to **TECHNIQUES FOR CONTROLLING HYBRID AUTOMATIC REPEAT REQUEST** (HARQ) (collectively the "INVENTIONS") for which WE have executed and/or may execute one or more patent applications therefor; and

WHEREAS, QUALCOMM Incorporated (hereinafter "ASSIGNEE"), a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., desires to acquire or otherwise obtain the entire right, title, and interest in and to said INVENTIONS, including all inventions related thereto or thereof, all patent applications therefor, and all patents that have granted or may be granted hereafter thereon, including but not limited to those identified below.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, WE do hereby acknowledge that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, the entire right, title, and interest throughout the world in and to said INVENTIONS, including all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in the United States, including but not limited to U.S. Application No(s). 17/108,667 filed December 01, 2020, Qualcomm Reference Number 200092, together with U.S Provisional Application No. 62/946,126 filed December 10,

2019, Qualcomm Reference Number 200092P1, (and do hereby authorize ASSIGNEE and its representative to hereafter add herein such application number(s) and/or filing date(s) when known), and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, and design applications thereof, and all issued patents of the United States which may have granted or may be granted hereafter thereon and all reissues, renewals, reexaminations, and extensions to any of the foregoing and all patents issuing thereon in the United States;

AND WE further do acknowledge and agree that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, all rights of priority under International Conventions, Treaties, or Agreements, and the entire right, title, and interest throughout the world in said INVENTIONS, including all inventions related thereto or thereof, and all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in any foreign country, countries, or treaty/union organizations, and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, patent of addition applications, confirmation applications, validation applications, utility model applications, and design applications thereof, and all issued patents which may have granted or may be granted hereafter for said INVENTIONS in any country or countries foreign to the United States, and all reissues, renewals, reexaminations, and extensions thereof;

AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, its legal representatives and its assigns, in accordance with the terms of this instrument;

AND WE DO HEREBY sell, assign, transfer, and convey to said ASSIGNEE, its successors, its legal representatives, and its assigns all claims for damages and all remedies arising out of or relating to any violation(s) of any of the rights assigned hereby that have or may have accrued prior to the date of assignment to said ASSIGNEE, or may accrue hereafter, including, but not limited to the right to sue for, seek, obtain, collect, recover, and retain damages and any ongoing or prospective royalties to which WE may be entitled, or that WE may collect for any infringement or from any settlement or agreement related to any of said patents before or after issuance;

AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, make all rightful declarations and/or oaths, and provide all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

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	City, State, Country	Date	Brian Clarke BANISTER
Done at	, on City, State, Country	Date	Supratik BHATTACHARJEE
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Done at	, on City, State, Country	Date	Udayan Murli BHAWNANI
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	City, State, Country	Date	Ahmed Omar Desouky ALI
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	City, State, Country		Date	Zhibin DANG
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Done at	ERIE, CO, USA City, State, Country	, on	01/27/2021 Date	Chetan Jagdeesh BHARADWAJ
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Done at	City, State, Country	, on	Date	Min WANG
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Page 5 of 6

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Page 5 of 6

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One of Date

Sumanth Kumar KOTA

PATENT REEL: 055875 FRAME: 0860

RECORDED: 04/09/2021