PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT6896191 Stylesheet Version v1.2

 SUBMISSION TYPE:
 NEW ASSIGNMENT

 NATURE OF CONVEYANCE:
 ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TIPU SALEEM QURESHI	08/18/2021
DIWAKAR GUPTA	08/18/2021
UPENDRA BHALCHANDRA SHEVADE	08/08/2021
ISHWARDUTT PARULKAR	08/16/2021

RECEIVING PARTY DATA

Name:	AMAZON TECHNOLOGIES, INC.
Street Address:	PO BOX 81226
City:	SEATTLE
State/Country:	WASHINGTON
Postal Code:	98108-1226

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17216389

CORRESPONDENCE DATA

Fax Number: (770)951-0933

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.

Correspondent Name: THOMAS | HORSTEMEYER, LLP
Address Line 1: 3200 WINDY HILL ROAD SE

Address Line 2: SUITE 1600E

Address Line 4: ATLANTA, GEORGIA 30339

ATTORNEY DOCKET NUMBER:	170120-1100
NAME OF SUBMITTER:	THOMAS B. HILDEBRANDT
SIGNATURE:	/Thomas B. Hildebrandt/
DATE SIGNED:	09/01/2021
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 11

PATENT REEL: 057358 FRAME: 0593

506849370

source=P73149-US01_	Post-Filed_Combined_Declaration_and_Assignment_docx#page1.tif
source=P73149-US01_	Post-Filed_Combined_Declaration_and_Assignment_docx#page2.tif
source=P73149-US01_	Post-Filed_Combined_Declaration_and_Assignment_docx#page3.tif
source=P73149-US01_	Post-Filed_Combined_Declaration_and_Assignment_docx#page4.tif
source=P73149-US01_	Post-Filed_Combined_Declaration_and_Assignment_docx#page5.tif
source=P73149-US01_	Post-Filed_Combined_Declaration_and_Assignment_docx#page6.tif
source=P73149-US01_	Post-Filed_Combined_Declaration_and_Assignment_docx#page7.tif
source=P73149-US01_	Post-Filed_Combined_Declaration_and_AssignmentIshwar_#page1.tif
source=P73149-US01_	Post-Filed_Combined_Declaration_and_AssignmentIshwar_#page2.tif
source=P73149-US01_	Post-Filed_Combined_Declaration_and_AssignmentIshwar_#page3.tif
source=P73149-US01_	Post-Filed_Combined_Declaration_and_AssignmentIshwar_#page4.tif

U.S. Patent Appln. No. 17/216,389 Filing Date 29 Mar 2021

Attorney Docket No. 170120-1100 Client Docket No. P73149-US01

PARTIES TO THE ASSIGNMENT

Assignor(s):

Tipu Saleem Qureshi 410 Terry Avenue North Seattle, WA 98109-5210

Diwakar Gupta 410 Terry Avenue North Seattle, WA 98109-5210

Upendra Bhalchandra Shevade 410 Terry Avenue North Seattle, WA 98109-5210

Ishwardutt Parulkar 410 Terry Avenue North Seattle, WA 98109-5210

Assignee:

Amazon Technologies, Inc. PO Box 81226 Seattle, WA 98108-1226

AGREEMENT

WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled

"SCHEDULING USE OF HETEROGENOUS FREQUENCY SCHEMES FOR RADIO-BASED NETWORKS"

(Invention) for which a non-provisional application for United States Letters Patent (Application):

was filed on 29 Mar 2021 and accorded U.S. Application No. 17/216,389; or

will be filed concurrently with the submission of this executed PATENT ASSIGNMENT for recordation. ASSIGNOR(S) hereby authorizes and requests ASSIGNEE'S legal representatives, of Thomas Horstemeyer, LLP, associated with Customer No. 71247, to insert in the header above and here in parentheses (U.S. Patent Application No.

Page 1 of 7

U.S. Patent Appln. No. 17/216,389

Filing Date 29 Mar 2021

Attorney Docket No. 170120-1100

Client Docket No. P73149-US01

Title of Invention: SCHEDULING USE OF HETEROGENOUS FREQUENCY SCHEMES FOR RADIO-

BASED NETWORKS

______, filed _____) this application's U.S. application number and filing

date, when known.

WHEREAS, ASSIGNEE, a corporation of the State of Nevada, is desirous of acquiring the

entire right, title and interest in and to the Invention and in and to any letters patent that may be

granted therefor in the United States and in any and all foreign countries.

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which

is hereby acknowledged, ASSIGNOR(S) hereby sell, assign and transfer unto ASSIGNEE its

successors and assigns, the entire right, title and interest in and to said Invention and any

improvements thereto, said Application and any and all letters patent which may be granted for

said Invention in the United States of America and its territorial possessions and in any and all

foreign countries, and in any and all provisional, divisions, reissues, re-examinations and

continuations thereof, including the right to file foreign applications directly in the name of

ASSIGNEE and to claim priority rights deriving from said Application to which said foreign

applications are entitled by virtue of international convention, treaty or otherwise, said Invention,

Application and all letters patent on said Invention to be held and enjoyed by ASSIGNEE and its

successors and assigns for their use and benefit and of their successors and assigns as fully and

entirely as the same would have been held and enjoyed by ASSIGNOR(S) had this assignment,

transfer and sale not been made. ASSIGNOR(S) hereby authorize and request the Commissioner

of Patents and Trademarks, as well as all other applicable patent offices throughout the world, to

issue all letters patent on said Invention to ASSIGNEE. ASSIGNOR(S) agree to execute all

instruments and documents required for the making and prosecution of applications for United

Page 2 of 7

U.S. Patent Appln. No. 17/216,389

Filing Date 29 Mar 2021

Attorney Docket No. 170120-1100

Client Docket No. P73149-US01

Title of Invention: SCHEDULING USE OF HETEROGENOUS FREQUENCY SCHEMES FOR RADIO-

BASED NETWORKS

States and foreign letters patent on said Invention, for litigation regarding said letters patent, or

for the purpose of protecting title to said Invention or letters patent therefor.

AND ASSIGNOR(S) DOES HEREBY sell, assign, transfer, and convey to ASSIGNEE, its

successors, legal representatives, and assigns all claims for damages and all remedies arising out

of any violation of the rights assigned hereby that may have accrued prior to the date of

assignment to ASSIGNEE, or may accrue hereafter, including, but not limited to, the right to sue

for, collect, and retain damages for past infringements of said letters patent before or after

issuance.

AND ASSIGNOR(S) DOES HEREBY covenant and agree that ASSIGNOR(S) will communicate

to ASSIGNEE, its successors, legal representatives and assigns, any facts known to ASSIGNOR

respecting the Invention or said Application, and testify in any legal proceeding, assist in the

preparation of any other patent property relating to the Application and the Invention or any

improvements made thereto, sign/execute all lawful papers, provide all requested documents,

execute and make all rightful oaths and/or declarations in connection with the Application and

the Invention including any improvements made thereto, any patent applications filed therefrom,

and any continuing application filed from any of the aforementioned applications, and generally

do everything possible to aid ASSIGNEE, its successors, legal representatives and assigns, to obtain

and enforce proper patent protection for the Invention in all countries. These provisions are

binding upon ASSIGNOR's heirs, legal representatives, administrators, and assigns.

Page 3 of 7

PATENT

REEL: 057358 FRAME: 0597

Date

PATENT ASSIGNMENT AND DECLARATION (37 CFR 1.63)

U.S. Patent Appln. No. 17/216,389 Filing Date 29 Mar 2021

Attorney Docket No. 170120-1100 Client Docket No. P73149-US01

Title of Invention: SCHEDULING USE OF HETEROGENOUS FREQUENCY SCHEMES FOR RADIO- BASED NETWORKS
<u>DECLARATION</u> As a below named inventor, I hereby declare that:
This declaration is directed to:
the attached application; or
United States Patent Application number 17/216,389 filed on 29 Mar 2021; or
PCT International Application number filed on
The above-identified application was made or authorized to be made by me.
I believe that I am the original inventor or an original joint inventor of a claimed Invention in the application.
I have reviewed and understand the contents of the above-identified application, and
acknowledge the duty to disclose to the US Patent & Trademark Office all information known to
me to be material to the patentability as defined in 37 CFR 1.56.
I hereby acknowledge that any willful false statement made in this declaration is punishable
under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.
DocuSigned by:
Tipu Saleem Qureshi/
Tipu Saleem Qureshi
August 18, 2021

U.S. Patent Appln. No. 17/216,389 Filing Date 29 Mar 2021

Attorney Docket No. 170120-1100 Client Docket No. P73149-US01

Title of Invention: SCHEDULING USE OF HETEROGENOUS FREQUENCY SCHEMES FOR RADIO-BASED NETWORKS

BASED NETWORKS
<u>DECLARATION</u> As a below named inventor, I hereby declare that:
This declaration is directed to:
the attached application; or
☑ United States Patent Application number 17/216,389 filed on 29 Mar 2021; or
PCT International Application number filed on
The above-identified application was made or authorized to be made by me.
I believe that I am the original inventor or an original joint inventor of a claimed Invention in the
application.
I have reviewed and understand the contents of the above-identified application, and acknowledge
the duty to disclose to the US Patent & Trademark Office all information known to me to be
material to the patentability as defined in 37 CFR 1.56.
I hereby acknowledge that any willful false statement made in this declaration is punishable under
18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.
DocuSigned by:
Diwakar Guptal
Diwakar Gupta
August 18, 2021
Date

U.S. Patent Appln. No. 17/216,389 Filing Date 29 Mar 2021

Attorney Docket No. 170120-1100 Client Docket No. P73149-US01

Title of Invention: SCHEDULING USE OF HETEROGENOUS FREQUENCY SCHEMES FOR RADIO-BASED NETWORKS

BASED NETWORKS
DECLARATION As a below named inventor, I hereby declare that:
This declaration is directed to:
the attached application; or
☑ United States Patent Application number 17/216,389 filed on 29 Mar 2021; or
PCT International Application number filed on
The above-identified application was made or authorized to be made by me.
I believe that I am the original inventor or an original joint inventor of a claimed Invention in the
application.
I have reviewed and understand the contents of the above-identified application, and acknowledge
the duty to disclose to the US Patent & Trademark Office all information known to me to be
material to the patentability as defined in 37 CFR 1.56.
I hereby acknowledge that any willful false statement made in this declaration is punishable under
18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.
DocuSigned by: (Upendra Bhalchandra Shevade/
Upendra Bhalchandra Shevade
August 18, 2021
Date

U.S. Patent Appln. No. 17/216,389 Filing Date 29 Mar 2021

Attorney Docket No. 170120-1100 Client Docket No. P73149-US01

Title of Invention: SCHEDULING USE OF HETEROGENOUS FREQUENCY SCHEMES FOR RADIO-BASED NETWORKS

DECLARATION As a below named inventor, I hereby declare that:
This declaration is directed to:
the attached application; or
☑ United States Patent Application number 17/216,389 filed on 29 Mar 2021; or
PCT International Application number filed on
The above-identified application was made or authorized to be made by me.
I believe that I am the original inventor or an original joint inventor of a claimed Invention in the application.
I have reviewed and understand the contents of the above-identified application, and acknowledg
the duty to disclose to the US Patent & Trademark Office all information known to me to be
material to the patentability as defined in 37 CFR 1.56.
I hereby acknowledge that any willful false statement made in this declaration is punishable under
18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.
 Ishwardutt Parulkar
Date

Page 7 of 7

U.S. Patent Appln. No. 17/216,389 Filing Date 29 Mar 2021

Attorney Docket No. 170120-1100 Client Docket No. P73149-US01

PARTIES TO THE ASSIGNMENT

Assignor(s):

Tipu Saleem Qureshi 410 Terry Avenue North Seattle, WA 98109-5210

Diwakar Gupta 410 Terry Avenue North Seattle, WA 98109-5210

Upendra Bhalchandra Shevade 410 Terry Avenue North Seattle, WA 98109-5210

Ishwardutt Parulkar 410 Terry Avenue North Seattle, WA 98109-5210

Assignee:

Amazon Technologies, Inc. PO Box 81226 Seattle, WA 98108-1226

AGREEMENT

WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled

"SCHEDULING USE OF HETEROGENOUS FREQUENCY SCHEMES FOR RADIO-BASED NETWORKS"

(Invention) for which a non-provisional application for United States Letters Patent (Application):

was filed on 29 Mar 2021 and accorded U.S. Application No. 17/216,389; or

will be filed concurrently with the submission of this executed PATENT ASSIGNMENT for recordation. ASSIGNOR(S) hereby authorizes and requests ASSIGNEE'S legal representatives, of Thomas Horstemeyer, LLP, associated with Customer No. 71247, to insert in the header above and here in parentheses (U.S. Patent Application No.

Page 1 of 4

U.S. Patent Appln. No. 17/216,389 Filing Date 29 Mar 2021

Attorney Docket No. 170120-1100 Client Docket No. P73149-US01

Title of Invention: SCHEDULING USE OF HETEROGENOUS FREQUENCY SCHEMES FOR RADIO-BASED NETWORKS

______, filed ______) this application's U.S. application number and filing date, when known.

WHEREAS, ASSIGNEE, a corporation of the State of Nevada, is desirous of acquiring the entire right, title and interest in and to the Invention and in and to any letters patent that may be granted therefor in the United States and in any and all foreign countries.

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sell, assign and transfer unto ASSIGNEE its successors and assigns, the entire right, title and interest in and to said Invention and any improvements thereto, said Application and any and all letters patent which may be granted for said Invention in the United States of America and its territorial possessions and in any and all foreign countries, and in any and all provisional, divisions, reissues, re-examinations and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said Application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, said Invention, Application and all letters patent on said Invention to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit and of their successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNOR(S) had this assignment, transfer and sale not been made. ASSIGNOR(S) hereby authorize and request the Commissioner of Patents and Trademarks, as well as all other applicable patent offices throughout the world, to issue all letters patent on said Invention to ASSIGNEE. ASSIGNOR(S) agree to execute all instruments and documents required for the making and prosecution of applications for United

Page 2 of 4

U.S. Patent Appln. No. 17/216,389

Filing Date 29 Mar 2021

Attorney Docket No. 170120-1100

Client Docket No. P73149-US01

Title of Invention: SCHEDULING USE OF HETEROGENOUS FREQUENCY SCHEMES FOR RADIO-

BASED NETWORKS

States and foreign letters patent on said Invention, for litigation regarding said letters patent, or

for the purpose of protecting title to said Invention or letters patent therefor.

AND ASSIGNOR(S) DOES HEREBY sell, assign, transfer, and convey to ASSIGNEE, its

successors, legal representatives, and assigns all claims for damages and all remedies arising out

of any violation of the rights assigned hereby that may have accrued prior to the date of

assignment to ASSIGNEE, or may accrue hereafter, including, but not limited to, the right to sue

for, collect, and retain damages for past infringements of said letters patent before or after

issuance.

AND ASSIGNOR(S) DOES HEREBY covenant and agree that ASSIGNOR(S) will communicate

to ASSIGNEE, its successors, legal representatives and assigns, any facts known to ASSIGNOR

respecting the Invention or said Application, and testify in any legal proceeding, assist in the

preparation of any other patent property relating to the Application and the Invention or any

improvements made thereto, sign/execute all lawful papers, provide all requested documents,

execute and make all rightful oaths and/or declarations in connection with the Application and

the Invention including any improvements made thereto, any patent applications filed therefrom,

and any continuing application filed from any of the aforementioned applications, and generally

do everything possible to aid ASSIGNEE, its successors, legal representatives and assigns, to obtain

and enforce proper patent protection for the Invention in all countries. These provisions are

binding upon ASSIGNOR's heirs, legal representatives, administrators, and assigns.

Page 3 of 4

RECORDED: 09/01/2021

PATENT ASSIGNMENT AND DECLARATION (37 CFR 1.63)

U.S. Patent Appln. No. 17/216,389 Filing Date 29 Mar 2021

Attorney Docket No. 170120-1100 Client Docket No. P73149-US01

Title of Invention: SCHEDULING USE OF HETEROGENOUS FREQUENCY SCHEMES FOR RADIO-

BASED NETWORKS
<u>DECLARATION</u> As a below named inventor, I hereby declare that:
This declaration is directed to:
the attached application; or
☑ United States Patent Application number 17/216,389 filed on 29 Mar 2021; or
PCT International Application number filed on
The above-identified application was made or authorized to be made by me.
I believe that I am the original inventor or an original joint inventor of a claimed Invention in the
application.
I have reviewed and understand the contents of the above-identified application, and acknowledge
the duty to disclose to the US Patent & Trademark Office all information known to me to be
material to the patentability as defined in 37 CFR 1.56.
I hereby acknowledge that any willful false statement made in this declaration is punishable under
18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.
DocuSigned by:
11shwardutt Panulkar1
Ishwardutt Parulkar
August 16, 2021
Date

Page 4 of 4