## 506338225 11/04/2020

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6384978

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
ZHESHEN WANG	10/26/2020
DIMITRIS PAPADIMITRIOU	10/15/2020
MEHRAN KAFAI	10/14/2020
JARROD SHERWIN	11/04/2020
ANTHONY SHARMA	10/16/2020
LEAH AUTUMN THOMPKINS	10/14/2020

### **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:	17089189

### **CORRESPONDENCE DATA**

Fax Number:

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.

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**Email:** mnick@kilpatricktownsend.com

Correspondent Name: KILPATRICK TOWNSEND & STOCKTON LLP / AMAZON

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ATTORNEY DOCKET NUMBER:	090204-1209439 (145600US)
NAME OF SUBMITTER:	MONICA NICK
SIGNATURE:	/Monica Nick/
DATE SIGNED:	11/04/2020

**Total Attachments: 10** 

PATENT REEL: 054273 FRAME: 0233

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PATENT REEL: 054273 FRAME: 0234

U.S. Patent Appln. No. <u>17/089,189</u> Filing Date <u>November 4</u>, 2020

Attorney Docket No. 090204-1209439 (145600US) Client Docket No. P71733-US01

### PARTIES TO THE ASSIGNMENT

### Assignor(s):

Zheshen Wang 410 Terry Avenue North Seattle, WA 98109-5210

Dimitris Papadimitriou 410 Terry Avenue North Seattle, WA 98109-5210

Mehran Kafai 410 Terry Avenue North Seattle, WA 98109-5210

Jarrod Sherwin 410 Terry Avenue North Seattle, WA 98109-5210

Anthony Sharma 410 Terry Avenue North Seattle, WA 98109-5210

Leah Autumn Thompkins 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 "ARTIFICIAL INTELLIGENCE (AI) MODELS TO IMPROVE IMAGE PROCESSING RELATED TO ITEM DELIVERIES" (Invention) for which a non-provisional application for United States Letters Patent (Application):

Page 1 of 10

PATENT REEL: 054273 FRAME: 0235

U.S. Patent Appln. No. 17/089,189 Filing Date November 4, 2020

Attorney Docket No. 090204-1209439 (145600US) Client Docket No. P71733-US01

Title of Invention: ARTIFICIAL INTELLIGENCE (AI) MODELS TO IMPROVE IMAGE PROCESSING RELATED TO ITEM DELIVERIES

Inventors: Zheshen Wang, Dimitris Papadimitriou, Mehran Kafai, Jarrod Sherwin, Anthony Sharma, Leah Autumn Thompkins,

Ш	was filed on and accorded U.S. Application No; or
$\boxtimes$	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 Kilpatrick Townsend & Stockton LLP, associated with Customer
	No. 107508, to insert in the header above and here in parentheses (U.S. Patent
	Application No. $\underline{17/089,189}$ , filed $\underline{November 4}$ , $\underbrace{2020}$ , this application's U.S. application

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.

number and filing date, when known.

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

Page 2 of 10

U.S. Patent Appln. No. 17/089,189

Attorney Docket No. 090204-1209439 (145600US)

Filing Date November 4, 2020

Client Docket No. P71733-US01

Title of Invention: ARTIFICIAL INTELLIGENCE (AI) MODELS TO IMPROVE IMAGE PROCESSING

**RELATED TO ITEM DELIVERIES** 

Inventors: Zheshen Wang, Dimitris Papadimitriou, Mehran Kafai, Jarrod Sherwin, Anthony

Sharma, Leah Autumn Thompkins,

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

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

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PATENT

REEL: 054273 FRAME: 0237

U.S. Patent Appln. No. <u>17/089,189</u> Filing Date <u>November 4</u>, 2020

Attorney Docket No. 090204-1209439 (145600US) Client Docket No. P71733-US01

Title of Invention: ARTIFICIAL INTELLIGENCE (AI) MODELS TO IMPROVE IMAGE PROCESSING RELATED TO ITEM DELIVERIES

Inventors: Zheshen Wang, Dimitris Papadimitriou, Mehran Kafai, Jarrod Sherwin, Anthony Sharma, Leah Autumn Thompkins,

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.

U.S. Patent Appln. No. 17/089,189

### PATENT ASSIGNMENT AND DECLARATION (37 CFR 1.63)

Attorney Docket No. 090204-1209439 (145600US)

Client Docket No. P71733-US01 Filing Date November 4, 2020 Title of Invention: ARTIFICIAL INTELLIGENCE (AI) MODELS TO IMPROVE IMAGE PROCESSING **RELATED TO ITEM DELIVERIES** Inventors: Zheshen Wang, Dimitris Papadimitriou, Mehran Kafai, Jarrod Sherwin, Anthony Sharma, Leah Autumn Thompkins, **DECLARATION** As a below named inventor, I hereby declare that: This declaration is directed to: the attached application; or United States Patent Application number \_\_\_\_\_\_ filed on \_\_\_\_\_; 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. DocuSianed by: / Lushen Wang Zheshen Wang October 26, 2020 Date

U.S. Patent Appln. No. <u>17/089,189</u> Filing Date <u>November</u> 4, 2020	Attorney Docket No. 090204-1209439 (145600US) Client Docket No. P71733-US01
Title of Invention: ARTIFICIAL INTELLIGENCE (ARELATED TO ITEM DELIVERIES	AI) MODELS TO IMPROVE IMAGE PROCESSING
Inventors: Zheshen Wang, Dimitris Papadimit Sharma, Leah Autumn Thompkins,	riou, Mehran Kafai, Jarrod Sherwin, Anthony
<b>DECLARATION</b> As a below named inventor, I hereby declare the	at:
This declaration is directed to:	
igstyle the attached application; or	
United States Patent Application no	ımber; or
PCT International Application number	per filed on
The above-identified application was made or a	authorized to be made by me.
I believe that I am the original inventor or an or application.	iginal joint inventor of a claimed Invention in the
I have reviewed and understand the contents of	f the above-identified application, and acknowledge
the duty to disclose to the US Patent & Tradem	ark Office all information known to me to be
material to the patentability as defined in 37 CI	FR 1.56.
I hereby acknowledge that any willful false stat	ement made in this declaration is punishable under
18 USC 1001 by fine or imprisonment of not mo	ore than five (5) years, or both.
سسر DocuSigned by:	
Dimitris Papadimitriou/	
Dimitris Papadimitriou	
October 15, 2020	
Date	

Filing Date <u>November</u> 4, 2020	Attorney Do	Client Docket	: No. P71733-US01
Fitle of Invention: ARTIFICIAL INTELLIGENCE ( RELATED TO ITEM DELIVERIES	(AI) MODELS 1	O IMPROVE IMAGE	PROCESSING
nventors: Zheshen Wang, Dimitris Papadimi Sharma, Leah Autumn Thompkins,	itriou, Mehrar	n Kafai, Jarrod Sher	win, Anthony
<u>DECLARATION</u> As a below named inventor, I hereby declare t	hat:		
This declaration is directed to:			
igstyle the attached application; or			
United States Patent Application n	number	filed on	; or
PCT International Application num	ber	filed on	·
The above-identified application was made or	authorized to	be made by me.	
believe that I am the original inventor or an o	original joint in	ventor of a claimed II	nvention in the
have reviewed and understand the contents	of the above-i	dentified application,	and acknowledge
the duty to disclose to the US Patent & Traden	nark Office all	information known to	o me to be
material to the patentability as defined in 37 C	CFR 1.56.		
hereby acknowledge that any willful false sta	tement made	in this declaration is	punishable under
18 USC 1001 by fine or imprisonment of not m	ore than five (	5) years, or both.	
······DocuSigned by:			
Mehran kafail			
Mehran Kafai			
October 14, 2020			
Date			

U.S. Patent Appln. No. $\underline{17/089,189}$ Attorney Docket No. 090204-1209439 (145600US) Filing Date $\underline{November}$ 4, 2020 Client Docket No. P71733-US01
Title of Invention: ARTIFICIAL INTELLIGENCE (AI) MODELS TO IMPROVE IMAGE PROCESSING RELATED TO ITEM DELIVERIES
Inventors: Zheshen Wang, Dimitris Papadimitriou, Mehran Kafai, Jarrod Sherwin, Anthony Sharma, Leah Autumn Thompkins,
DECLARATION As a below named inventor, I hereby declare that:
This declaration is directed to:
the attached application; or
United States Patent Application number filed on; 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.
/Jarrod Sherwin/
Jarrod Sherwin
November 4, 2020
Date

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U.S. Patent Appln. No. $\frac{17/089,189}{4,\ 2020}$ Attorney Docket No. 090204-1209439 (145600US) Client Docket No. P71733-US01
Title of Invention: ARTIFICIAL INTELLIGENCE (AI) MODELS TO IMPROVE IMAGE PROCESSING RELATED TO ITEM DELIVERIES
Inventors: Zheshen Wang, Dimitris Papadimitriou, Mehran Kafai, Jarrod Sherwin, Anthony Sharma, Leah Autumn Thompkins,
DECLARATION As a below named inventor, I hereby declare that:
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igstyle igy igstyle igy igstyle igy igstyle igy igy igy igy igy igy igy igy
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The above-identified application was made or authorized to be made by me.
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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:
/Authory Sharma/
Anthony Sharma
October 16, 2020
Date

**RECORDED: 11/04/2020** 

# **PATENT ASSIGNMENT AND DECLARATION (37 CFR 1.63)**

U.S. Patent Appln. No. <u>17/089,189</u> Atto Filing Date <u>November</u> 4, 2020	rney Docket No. 090204-1209439 (145600US) Client Docket No. P71733-US01
Title of Invention: ARTIFICIAL INTELLIGENCE (AI) MORELATED TO ITEM DELIVERIES	ODELS TO IMPROVE IMAGE PROCESSING
Inventors: Zheshen Wang, Dimitris Papadimitriou, Sharma, Leah Autumn Thompkins,	Mehran Kafai, Jarrod Sherwin, Anthony
<b>DECLARATION</b> As a below named inventor, I hereby declare that:	
This declaration is directed to:	
igstyle the attached application; or	
United States Patent Application number	r; or
PCT International Application number	filed on
The above-identified application was made or author	·
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 the duty to disclose to the US Patent & Trademark O material to the patentability as defined in 37 CFR 1.5	ffice all information known to me to be
I hereby acknowledge that any willful false statemen	t made in this declaration is punishable under
18 USC 1001 by fine or imprisonment of not more th	an five (5) years, or both.
/leal Autumn thompkins/	
Leah Autumn Thompkins	
October 14, 2020	
Date	

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PATENT REEL: 054273 FRAME: 0244