PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7487658

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JOHN ROSSI	02/27/2019
SCOTT A LINN	02/27/2019
JAMES M GARDNER	08/28/2020
ERIK D. NESS	03/01/2019

RECEIVING PARTY DATA

Name:	HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P.
Street Address:	10300 ENERGY DRIVE
City:	SPRING
State/Country:	TEXAS
Postal Code:	77389

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17865253

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.

 Phone:
 12028315816

 Email:
 ipa.mail@hp.com

Correspondent Name: HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P.

Address Line 1: 10300 ENERGY DRIVE Address Line 4: SPRING, TEXAS 77389

ATTORNEY DOCKET NUMBER: 86161334

NAME OF SUBMITTER: MARK A. PETERSON

SIGNATURE: /Mark A. Peterson/

DATE SIGNED: 08/16/2022

Total Attachments: 4

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PATENT 507440756 REEL: 060819 FRAME: 0967

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PATENT REEL: 060819 FRAME: 0968 HP Inc. 3390 E. Harmony Road Mail Stop 35 Fort Collins, Colorado 80528

ASSIGNMENT OF PATENT APPLICATION

I, the undersigned, for good and valuable consideration, the red			
transfer and hereby assign and transfer to HEWLETT-PACKARD DE having its principal place of business in Spring, Texas, (hereinafter " and interest, including all rights of priority, in, to, and under an applica if said application for patent is in another language):	HPDC"), its	successors, and it	s assigns, my entire right, title,
IDENTIFYING RANDOM BITS IN CONTROL DATA PACKETS			
Filing Date: 06 Feb 2019 Application No.:	PCT/US20	19/016739	Patent Office: <u>US</u> ;
the subject matter, including any and all inventions, improvements, ar herein "patent" refers to any form of intellectual property protection indusing rights, and utility model rights) (hereinafter "Inventions"); are country or region or under any international agreement for any of sall patent, any and all applications for patent directly or indirectly claiming said inventions, any and all applications for patent from which any indirectly claims priority or benefit, and any and all continuation applicational applications of, national-phase applications of, regional application for patent for any of said Inventions) (hereinafter "Application or as a result of said Applications for Patent (hereinafter "Patents of said Applications for Patent).	cluding, with ny and all e d Inventions ng priority to application cations of, cations of, cations for Pa titions for Pa	out limitation, inve- xisting and future s (including, withou or benefit of any a for patent for any ontinuation-in-part lications of, renew tent"); any and all	ntion rights, utility patent rights, applications for patent of any it limitation, said application for application for patent for any of y of said Inventions directly or applications (hereinafter CIPs) vais of, and substitutes for any patents which may be granted
I HEREBY represent that I convey my full rights in all countries entire right, title, and interest herein assigned and transferred, and the conflict herewith;			
AND I HEREBY authorize HPDC, its successors, its assign: Applications for Patent in its name or in my name in any country of authorize HPDC, its successors, its assigns, its nominees, and its number, and patent office of said application for patent, now identified them;	or region or s legal repr	under any interna esentatives to ins	ational agreement, and further ert the filing date, application
AND I HEREBY authorize and request the officials of all countried duty it is to issue patents, to issue to HPDC, its successors, or its as Patents, in accordance with the terms of this assignment and transfer	signs, as as		
AND I HEREBY covenant and agree that I will, each time a requisuch papers as may be necessary or desirable to perfect the title HPDC, its successors, or its assigns; communicate to HPDC, its success like known facts respecting said inventions, Applications for Patent, and sign all lawful papers (including, without limitation, divisional applications) relating to said inventions, Applications for Patent, and generally to do everything possible to aid HPDC, its successors, its amaintain, and enforce, for its or their own benefit, proper intellectual pand Patents, provided the expenses which may be incurred by me in its successors, its assigns, its nominees, or its legal representatives.	in said inve- lessors, its a nd Patents; application d Patents; a assigns, its r roperty prote	entions, Application assigns, its nomine testify in any legal s, continuation as and make all right aominees, and its lection for said inve	ns for Patent, and Patents, to es, or its legal representatives, or administrative proceedings iplications, CIPs, and reissue ul oaths and declarations and legal representatives to obtain, intions, Applications for Patent,
IN WITNESS WHEREOF, I hereunto set my hand and seal:	a	· ·	2
1/2/6	27	teb	2019
inventor's Signature	Day	Month	Year
John Rossi			
Given (First and Middle) Name(s) Family Name			

Rev 8/2018 (HPDC Assignment)

PATENT APPLICATION

HP Inc. 3390 E. Harmony Road Mail Stop 35 Fort Collins, Colorado 80528

IDENTIFYING RANDOM BITS IN CONTROL DATA PACKETS

RECORD	ID:_	85005978
RECORD	ID:_	85005978

ASSIGNMENT OF PATENT APPLICATION

I, the undersigned, for good and valuable consideration, the receipt of which is hereby acknowledged, agree to assign and transfer and hereby assign and transfer to HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P., a Texas Limited Partnership having its principal place of business in Spring, Texas, (hereinafter "HPDC"), its successors, and its assigns, my entire right, title, and interest, including all rights of priority, in, to, and under an application for patent entitled (English-language title in parentheses if said application for patent is in another language):

Filing Date: 06 Feb 2019	Application No.:	PCT/US2019/016739	Patent Office: US
the subject matter, including any and all in herein "patent" refers to any form of intelle	nventions, improvements, ar	nd discoveries, set forth in said a	application for patent (as used
design rights, and utility model rights) (i	hereinafter "Inventions"): ar	nv and all existing and future a	applications for natent of an
country or region or under any internation	nal agreement for any of sa	id Inventions (including, without	limitation, said application for
patent, any and all applications for patent	t directly or indirectly claiming	ng priority to or benefit of any ag	oplication for patent for any o
said Inventions, any and all applications	for patent from which any	application for patent for any	of said Inventions directly or
indirectly claims priority or benefit, and ar	ny and all continuation appli	cations of, continuation-in-part a	applications (hereinafter CIPs)
of, divisional applications of, national-pha	ase applications of regions	Il-phase applications of, renewa	ils of, and substitutes for any
application for patent for any of said Inve	entions) (hereinafter "Applica	ations for Patent"); any and all p	atents which may be granted
on or as a result of said Applications for	Patent (hereinafter "Patents	"); and any and all reissues, re-	examinations, and extensions
of said Applications for Patent or said Patent	ents.		

I HEREBY represent that I convey my full rights in all countries and regions and under all international agreements to the entire right, title, and interest herein assigned and transferred, and that I have not executed and will not execute any agreement in conflict herewith;

AND I HEREBY authorize HPDC, its successors, its assigns, its nominees, and its legal representatives to file said Applications for Patent in its name or in my name in any country or region or under any international agreement, and further authorize HPDC, its successors, its assigns, its nominees, and its legal representatives to insert the filing date, application number, and patent office of said application for patent, now identified by the Record ID and title set forth above, when known to them:

AND I HEREBY authorize and request the officials of all countries and regions and under all international agreements whose duty it is to issue patents, to issue to HPDC, its successors, or its assigns, as assignee of my entire right, title, and interest, said Patents, in accordance with the terms of this assignment and transfer;

AND I HEREBY covenant and agree that I will, each time a request is made, and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title in said Inventions, Applications for Patent, and Pâtents, to HPDC, its successors, or its assigns; communicate to HPDC, its successors, its assigns, its nominees, or its legal representatives, all known facts respecting said Inventions, Applications for Patent, and Patents; testify in any legal or administrative proceedings and sign all lawful papers (including, without limitation, divisional applications, continuation applications, CIPs, and reissue applications) relating to said Inventions, Applications for Patent, and Patents; and make all rightful oaths and declarations and generally to do everything possible to aid HPDC, its successors, its assigns, its nominees, and its legal representatives to obtain, maintain, and enforce, for its or their own benefit, proper intellectual property protection for said Inventions, Applications for Patent, and Patents, provided the expenses which may be incurred by me in lending such cooperation and assistance are paid by HPDC, its successors, its assigns, its nominees, or its legal representatives.

Rev 8/2018 (HPDC Assignment)

PATENT A	ાવવ/	CAT	301
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HP Inc. 3390 E. Harmony Road Mail Stop 35 Fort Collins, Colorado 80528

RECORD ID:	85005978

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Filling Date: 06 Feb 2019	Application No.:	PCT/US2019/016739	Patent Office:	US

the subject matter, including any and all inventions, improvements, and discoveries, set forth in said application for patent (as used herein "patent" refers to any form of intellectual property protection including, without limitation, invention rights, utility patent rights, design rights, and utility model rights) (hereinafter "inventions"); any and all existing and future applications for patent of any country or region or under any international agreement for any of said inventions (including, without limitation, said application for patent, any and all applications for patent directly or indirectly claiming priority to or benefit of any application for patent for any of said inventions, any and all applications for patent from which any application for patent for any of said inventions directly or indirectly claims priority or benefit, and any and all continuation applications of, continuation-in-part applications (hereinafter CIPs) of, divisional applications of, national-phase applications of, regional-phase applications of, renewals of, and substitutes for any application for patent for any of said inventions) (hereinafter "Applications for Patent"); any and all patents which may be granted on or as a result of said Applications for Patent (hereinafter "Patents"); and any and all reissues, reexaminations, and extensions of said Applications for Patent (hereinafter "Patents"); and any and all reissues, reexaminations, and extensions

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AND I HEREBY authorize and request the officials of all countries and regions and under all international agreements whose duty it is to issue patents, to issue to HPDC, its successors, or its assigns, as assignee of my entire right, title, and interest, said Patents, in accordance with the terms of this assignment and transfer;

AND I HEREBY covenant and agree that I will, each time a request is made, and without undus delay, execute and deliver all such papers as may be necessary or desirable to perfect the fittle in said Inventions, Applications for Patent, and Patents, to HPDC, its successors, or its assigns; communicate to HPDC, its successors, its assigns, its nominees, or its legal representatives, all known facts respecting said Inventions, Applications for Patent, and Patents; testify in any legal or administrative proceedings and sign all lawful papers (including, without limitation, divisional applications, continuation applications, CIPs, and reissue applications) relating to said Inventions, Applications for Patent, and Patents; and make all rightful paths and declarations and generally to do everything possible to aid HPDC, its successors, its assigns, its nominees, and its legal representatives to obtain, and enforce, for its or their own benefit, proper intellectual property protection for said inventions, Applications for Patent, and Patents, provided the expenses which may be incurred by me in lending such cooperation and assistance are paid by HPDC, its successors, its assigns, its nominees, or its legal representatives.

IN WITNESS WHEREOF, I hereunto set my hand and seal:	78	Q	2670
Topenior's Signature	Day	Month	Year
James Michael Gardner			
Given (First and Middle) Name(s) Family Name			

Rev 8/2018 (HPDC: Assignment)

HP Inc. 3390 E. Harmony Road Mail Stop 35 Fort Collins, Colorado 80528

Filing Date: 06 Feb 2019

of said Applications for Patent or said Patents.

RECORD	ID:	85005978

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IDENTIFYING RANDOM BITS IN CONTROL DATA PACKETS

		Faterit Office, 03
the subject matter, including any and all invent	tions, improvements, and discoveries, set forth in said	application for patent (as used
herein "patent" refers to any form of intellectua	I property protection including, without limitation, inven	tion rights, utility patent rights
design rights, and utility model rights) (herei	nafter "Inventions"); any and all existing and future :	applications for patent of any
country or region or under any international ag	greement for any of said Inventions (including, without	limitation, said application fo
patent, any and all applications for patent dire	ctly or indirectly claiming priority to or benefit of any a	pplication for patent for any o
said inventions, any and all applications for	patent from which any application for patent for any	of said Inventions directly o
indirectly claims priority or benefit, and any an	d all continuation applications of, continuation-in-part	applications (hereinafter CIPs
or, divisional applications of, national-phase a	applications of, regional-phase applications of, renewa	als of, and substitutes for any
on or as a result of said Applications for Deter	ns) (hereinafter "Applications for Patent"); any and all p	patents which may be granted

Application No - PCT/IIS2040/046730

i HEREBY represent that I convey my full rights in all countries and regions and under all international agreements to the entire right, title, and interest herein assigned and transferred, and that I have not executed and will not execute any agreement in conflict herewith;

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IN WITNESS WHEREOF, I hereunto set my hand and seal:						
and DN-		1	MRNO	1	20	19
Inventor's Signature		Day	Month		Year	
Erik D. Ness						
Given (First and Middle) Name(s)	Family Name			*		

Rev 8/2018 (HPDC Assignment)

PATENT REEL: 060819 FRAME: 0972

RECORDED: 08/16/2022