PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5704844

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SHIVAM PRIYADARSHI	09/05/2019
YUSUF CAGATAY TEKMEN	09/05/2019
RODNEY WAYNE SMITH	09/05/2019
VIGNYAN REDDY KOTHINTI NARESH	09/05/2019

RECEIVING PARTY DATA

Name: MICROSOFT TECHNOLOGY LICENSING, LLC	
Street Address: ONE MICROSOFT WAY	
City: REDMOND	
State/Country: WASHINGTON	
Postal Code: 98052	

PROPERTY NUMBERS Total: 1

Property Type	Number		
Application Number:	16562591		

CORRESPONDENCE DATA

Fax Number: (877)812-1249

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: 919-238-2300

Email:usdocket@microsoft.comCorrespondent Name:WITHROW + TERRANOVAAddress Line 1:106 PINEDALE SPRINGS WAYAddress Line 4:CARY, NORTH CAROLINA 27511

ATTORNEY DOCKET NUMBER:	7006-013
NAME OF SUBMITTER:	KAT M. KENNY
SIGNATURE:	/Kat M. Kenny/
DATE SIGNED:	09/06/2019

Total Attachments: 8

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PATENT 505658039 REEL: 050289 FRAME: 0363

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PATENT REEL: 050289 FRAME: 0364

PATENT ASSIGNMENT

I <u>Shivam PRIYADARSHI</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "<u>MINIMIZING TRAVERSAL OF A PROCESSOR REORDER BUFFER (ROB) FOR REGISTER RENAME MAP TABLE (RMT) STATE RECOVERY FOR INTERRUPTED INSTRUCTION RECOVERY IN A PROCESSOR" ("APPLICATION"), which:</u>

MS Docket No.: 407185-US-NP

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Microsoft Technology Licensing, LLC, a Washington limited liability company, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is desirous of acquiring, the entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES")):

ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S LEGAL REPRESENTATIVES to insert the Application No., filing date, and Office into the following table for any APPLICATION DERIVATIVES after they are known:

Application No.	Filing Date	Office
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For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

Shvam	03/05/2015
Inventor's Signature	Date
Shivam PRIYADARSHI	
Printed Name in English	Printed Name in Native Language
	(if other than English)

PATENT ASSIGNMENT

I Yusuf Cagatay TEKMEN ("ASSIGNOR") am the original inventor or an original
joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent
application entitled " <u>MINIMIZING TRAVERSAL OF A PROCESSOR REORDER BUFFER (ROB)</u>
<u>FOR REGISTER RENAME MAP TABLE (RMT) STATE RECOVERY FOR INTERRUPTED</u>
INSTRUCTION RECOVERY IN A PROCESSOR" ("APPLICATION"), which:
will be filed. ASSIGNOR hereby authorizes, and requests,
ASSIGNEE'S legal representative, Microsoft Technology Licensing,
LLC, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S
LEGAL REPRESENTATIVES), to insert here in parentheses (filed
on and given Application
No by the following Office <u>US - United States</u>
Patent and Trademark Office) this APPLICATION's Application No.,

MS Docket No.: 407185-US-NP

was filed on	and was given A	\pplication
No	by the following Office	
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filing date, and Office, when known;

Microsoft Technology Licensing, LLC, a Washington limited liability company, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is desirous of acquiring, the entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S LEGAL REPRESENTATIVES to insert the Application No., filing date, and Office into the following table for any APPLICATION DERIVATIVES after they are known;

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For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES")):

<u> </u>		
	Logatortiling	09. 05. 2019
	Inventor's Signature	Date
	Yusuf Cagatay TEKMEN	
	Printed Name in English	Printed Name in Native Language
L		(if other than English)

PATENT ASSIGNMENT

I <u>Rodney Wayne SMITH</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "<u>MINIMIZING TRAVERSAL OF A PROCESSOR REORDER BUFFER (ROB) FOR REGISTER RENAME MAP TABLE (RMT) STATE RECOVERY FOR INTERRUPTED INSTRUCTION RECOVERY IN A PROCESSOR" ("APPLICATION"), which:</u>

MS Docket No.: 407185-US-NP

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Microsoft Technology Licensing, LLC, a Washington limited liability company, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is desirous of acquiring, the entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES")):

ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S LEGAL REPRESENTATIVES to insert the Application No., filing date, and Office into the following table for any APPLICATION DERIVATIVES after they are known;

Application No.	Filing Date	Office	

PATENT ASSIGNMENT MS Docket No.: 407185-US-NP

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Radney Way Smith	9/5/2019			
Inventor's Signature	Date			
Rodney Wayne SMITH				
Printed Name in English	Printed Name in Native Language			
	(if other than English)			

PATENT ASSIGNMENT MS Docket No.: 407185-US-NP

			am the original inventor or an
· ·			disclosed and/or claimed in a
·		<u></u>	PROCESSOR REORDER BUFFER
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INSTRUCTION	<u>I RECOVERY IN A P</u>	<u>ROCESSOR"</u> ("APPLICATIO	N"), which:
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	ASSIGNEE'S legal	representative, Microsoft	Technology Licensing,
	LLC, One Microsol	t Way, Redmond, Washin	gton 98052 (ASSIGNEE'S
	LEGAL REPRESENT	TATIVES), to insert here	in parentheses (filed
	on	and	given Application
	No		ice <u>US – United States</u>
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For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

Cana 9-1	09/05/2019
Inventor's Signature	Date
Vignyan Reddy KOTHINTI NARESH	
Printed Name in English	Printed Name in Native Language (if other than English)