504456211 07/13/2017 PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:		NEW ASSIGNMENT				
NATURE OF CONVEYA	NCE:	ASSIGNMENT				
CONVEYING PARTY D	ΑΤΑ	i				
		Name		Execution Date		
KAMRAN ETEMAD				09/03/2013		
MO-HAN FONG				09/09/2013		
JONG-KAE FWU				09/09/2013		
HUANING NIU				09/04/2013		
RECEIVING PARTY DA	TA					
Name:	INTEL	CORPORATION				
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City:	SANTA	SANTA CLARA				
State/Country:	CALIF	CALIFORNIA				
Postal Code:	95054					
PROPERTY NUMBERS	lotal: 1	Number				
Property Type						
Application Number:		15613818				
CORRESPONDENCE D	ΑΤΑ					
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Correspondent Name:		THORPE NORTH & WEST	TERN LLP			
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Adduces Lives As		SANDY, UTAH 84091				
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ATTORNEY DOCKET NU	JMBER:)			
ATTORNEY DOCKET NU NAME OF SUBMITTER:	JMBER:	P41082USC2)			
ATTORNEY DOCKET NU NAME OF SUBMITTER: SIGNATURE:	JMBER:	P41082USC2 ALEX W. HAYMONI)			
Address Line 4: ATTORNEY DOCKET NU NAME OF SUBMITTER: SIGNATURE: DATE SIGNED: Fotal Attachments: 5	JMBER:	P41082USC2 ALEX W. HAYMONI /Alex W. Haymond/)			
ATTORNEY DOCKET NU NAME OF SUBMITTER: SIGNATURE: DATE SIGNED:	-	P41082USC2 ALEX W. HAYMONI /Alex W. Haymond/)			
ATTORNEY DOCKET NU NAME OF SUBMITTER: SIGNATURE: DATE SIGNED: Total Attachments: 5	91.tif 92.tif	P41082USC2 ALEX W. HAYMONI /Alex W. Haymond/)			

ASSIGNMENT

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we, the undersigned inventor(s):

KAMRAN ETEMAD: MO-HAN FONG; JONG-KAE FWU; HUANING NIU

hereby sell, assign, and transfer to:

Intel Corporation

a corporation of Delaware, having a principal place of business at 2200 Mission College Boulevard, Santa Clara, California, 95054 USA ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all inventions and improvements that are disclosed in the application for the United States patent entitled:

FORMING CARRIER AGGREGATION TIMING ADVANCE GROUPS IN A HETEROGENEOUS NETWORK

(I hereby authorize and request any attorney having appropriate authority from the assignee to insert on the designated lines below, the filing date and application number of said application when known.)

which was filed on \underline{D}	December 20, 2011					
International COUNTRY or Internat		PCT/US2011/066212	and			

which has been executed by the undersigned prior hereto or concurrently herewith on the date(s) indicated below,

and in and to said application and all Additional Applications, and all other patent applications that have been or shall be filed in the United States and all other countries and international filing offices on any of said inventions and improvements; and in and to all original and reissued patents that have been or shall be issued in the United States and all other countries and international filing offices on said inventions and improvements; and in and to all rights of priority resulting from the filing of said applications; as used herein "Additional Applications" includes but is not limited to design, utility, utility model, divisional, continuing, continuation-in-part, substitute, renewal, reissue, and national phase applications on said inventions and improvements:

and agree that said Assignee may apply for and receive a patent or patents for said inventions and improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee. Its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all design, utility, divisional, continuing, continuation-in-part, substitute, renewal, reissue, and all other patent applications on any and all said inventions and improvements; execute all rightful oaths, assignments, powers of attorney.

Page 1 of 2

PATENT REEL: 043002 FRAME: 0018

and other papers; communicate to said Assignee, its successors, assigns, and legal representatives all facts known to the undersigned relating to said inventions and improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or legal representatives in securing and maintaining proper patent protection for said inventions and improvements and for vesting title to said inventions and improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Ket

Kamran Etemad

Mo-Han Fong

Jong-Kae Fwu

Huaning Niu

Date signed

9/3/2013

Date signed

Date signed

Date signed

Page 2 of 2

and other papers; communicate to said Assignee, its successors, assigns, and legal representatives all facts known to the undersigned relating to said inventions and improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or legal representatives in securing and maintaining proper patent protection for said inventions and improvements and for vesting title to said inventions and improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

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Kamran Etemad

Mo-Han Fong

Jong-Kae Fwu

Huaning Niu

Date signed

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Page 2 of 2

PATENT REEL: 043002 FRAME: 0020 and other papers; communicate to said Assignee, its successors, assigns, and legal representatives all facts known to the undersigned relating to said inventions and improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or legal representatives in securing and maintaining proper patent protection for said inventions and improvements and for vesting title to said inventions and improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

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Kamran Etemad

Date signed

Mo-Han Fong

Jong-Kae Fwu

Huaning Nin

Date signed

1/9/2013

Date signed

Date signed

PATENT REEL: 043002 FRAME: 0021

and other papers; communicate to said Assignee, its successors, assigns, and legal representatives all facts known to the undersigned relating to said inventions and improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or legal representatives in securing and maintaining proper patent protection for said inventions and improvements and for vesting title to said inventions and improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

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Kamran Etemad

Mo-Han Fong

Jong-Kae Fwu

Huaning Niu

Date signed

Date signed

Date signed

91612-013

Date signed

Page 2 of 2

PATENT REEL: 043002 FRAME: 0022

RECORDED: 07/13/2017