502092815 10/12/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Matthew P. J. Baker	09/25/2012
Federico Boccardi	09/26/2012

RECEIVING PARTY DATA

Name:	Alcatel Lucent
Street Address:	3, avenue Octave Greard
City:	Paris
State/Country:	FRANCE
Postal Code:	75007

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13580732

CORRESPONDENCE DATA

Fax Number: 2163639001

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 216.363.9000

Email:rgiuliani@faysharpe.comCorrespondent Name:Fay Sharpe/LucentAddress Line 1:1228 Euclid Avenue

Address Line 2: Fifth Floor

Address Line 4: Cleveland, OHIO 44115

ATTORNEY DOCKET NUMBER:	LUTZ 201502US01
NAME OF SUBMITTER:	Joseph D. Dreher

Total Attachments: 4

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> PATENT REEL: 029119 FRAME: 0980

OF \$40.00 13580752

Atty. Docket No. LUTZ 201502US01 ALU No. 807007

WHEREAS, the undersigned, hereinafter referred to collectively as Assignor, has invented:

CHANNEL STATE INFORMATION FEEDBACK

for which	Assignor i	is about to	make or I	has	made	United	States	or	International	annlication	for
patent								-	Tribot lation (a)	application	IQI

(a)		executed on even date preparatory to filing;
(b)		executed on,; or
(c)	\boxtimes	filed on August 23, 2012, and assigned Serial No. 13/580,732 which is the U.S. national filing of PCT International Application No. PCT/EP2011/000670 filed on February 14, 2011; and

WHEREAS, Alcatel Lucent, 3, avenue Octave Gréard, 75007, Paris, France, hereinafter referred to as Assignee, is desirous of acquiring all right, title, and interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy whereof is hereby acknowledged, Assignor agrees to, and hereby does, sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and throughout the world, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the invention as described in the aforesaid application and all United States Letters Patent which may be granted therefore, and all divisions, continuations, reissues, reexaminations and extensions thereof, these rights, title and interest to be held and enjoyed by Assignee to the full end of the term for which the Letters Patent are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to sue for, and recover for past infringements of, or liabilities for, any of the rights relating to any of the applications or patents resulting therefrom;

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, re-examination, or extension thereof, and for litigation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee without further or other compensation than that above set forth;

Assignor hereby covenants that no assignment, sale, license, agreement or encumbrance has been or will be entered into which would conflict with this Assignment; and

Assignor hereby requests the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue the Letters Patent, Utility Model Registration or Inventor's Certificate to Assignee.

The undersigned hereby grant(s) the law firm of Fay Sharpe LLP the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

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Matthew P.J. Bok	Atty. Docket No. LUTZ 201502US01 ALU No. 807007
Matthew P.J. BAKER	
25/9/2012	
Dated /	
Federico BOCCARDI	
Dated	

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PATENT REEL: 029119 FRAME: 0982

Atty. Docket No. LUTZ 201502US01 ALU No. 807007

WHEREAS, the undersigned, hereinafter referred to collectively as Assignor, has invented:

CHANNEL STATE INFORMATION FEEDBACK

for which patent	Assignor is	s about to make or has made United States or International application for
(a)		executed on even date preparatory to filing;
(b)		executed on,; or
(c)		filed on August 23, 2012, and assigned Serial No. 13/580,732 which is the U.S. national filing of PCT International Application No PCT/EP2011/000670 filed on February 14, 2011; and

WHEREAS, Alcatel Lucent, 3, avenue Octave Gréard, 75007, Paris, France, hereinafter referred to as Assignee, is desirous of acquiring all right, title, and interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy whereof is hereby acknowledged, Assignor agrees to, and hereby does, sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and throughout the world, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the invention as described in the aforesaid application and all United States Letters Patent which may be granted therefore, and all divisions, continuations, reissues, reexaminations and extensions thereof, these rights, title and interest to be held and enjoyed by Assignee to the full end of the term for which the Letters Patent are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to sue for, and recover for past infringements of, or liabilities for, any of the rights relating to any of the applications or patents resulting therefrom;

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, re-examination, or extension thereof, and for litigation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee without further or other compensation than that above set forth;

Assignor hereby covenants that no assignment, sale, license, agreement or encumbrance has been or will be entered into which would conflict with this Assignment; and

Assignor hereby requests the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue the Letters Patent, Utility Model Registration or Inventor's Certificate to Assignee.

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Atty. Docket No. LUTZ 201502US01 ALU No. 807007

Matthew P.J. BAKER	
Dated	
Jedin Board	
Federico BOCCARDI	
26-9-2012	
Dated	

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PATENT REEL: 029119 FRAME: 0984

RECORDED: 10/12/2012