504271936 03/15/2017

EPAS ID: PAT4318618

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

SUBMISSION TYPE:NEW ASSIGNMENTNATURE OF CONVEYANCE:ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ROGER ESPASA	02/20/2003
GUILLEM SOLE	11/27/2014
DAVID GUILLEN FANDOS	11/20/2014

RECEIVING PARTY DATA

Name:	INTEL CORPORATION
Street Address:	2200 MISSION COLLEGE BOULEVARD
City:	SANTA CLARA
State/Country:	CALIFORNIA
Postal Code:	95054

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15508284

CORRESPONDENCE DATA

Fax Number: (612)677-3572

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.

Email: ILOH-Formals@cpaglobal.com
Correspondent Name: VECCHIA PATENT AGENT LLC

Address Line 1: C/O CPA GLOBAL

Address Line 2: 900 SECOND AVENUE SOUTH, SUITE 600

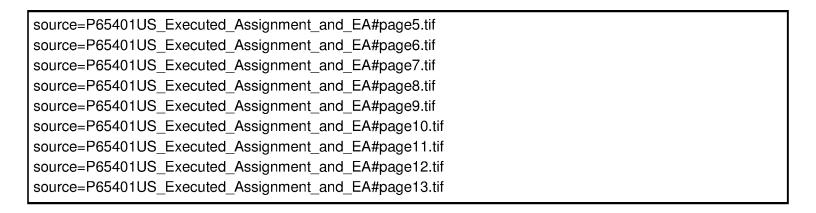
Address Line 4: MINNEAPOLIS, MINNESOTA 55402

ATTORNEY DOCKET NUMBER:	P65401US
NAME OF SUBMITTER:	PREETI SAGAR
SIGNATURE:	/PREETI SAGAR/
DATE SIGNED:	03/15/2017

Total Attachments: 13

source=P65401US_Executed_Assignment_and_EA#page1.tif source=P65401US_Executed_Assignment_and_EA#page2.tif source=P65401US_Executed_Assignment_and_EA#page3.tif source=P65401US_Executed_Assignment_and_EA#page4.tif

PATENT 504271936 REEL: 041574 FRAME: 0479



PATENT REEL: 041574 FRAME: 0480

ASSIGNMENT

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

ROGER ESPASA; GUILLEM SOLE; DAVID GUILLEN FANDOS

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 other countries, in and to any and all inventions and improvements that are disclosed in the application for the patent entitled:

BIT SHUFFLE PROCESSORS, METHODS, SYSTEMS, AND INSTRUCTIONS

designated lines below, the filling date and ap	plication number of s	said application when known.)	
which was filed on March 0	2, 2017		
U.S. COUNTRY or International Office	Application Number	15/508,284	and

(I hereby authorize and request any attorney having appropriate authority from the assignee to insert on the

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 Additional Applications, and all other patent applications on any and all said inventions and improvements; execute all rightful oaths, assignments, powers of attorney, 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

Page 1 of 2

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.

Roger Espasa	Date signed
Guillem Sole	Date signed
3	χ

Page 2 of 2

Tel.: 34 91 432 90 90 Fax: 34 91 432 90 58 http://www.intel.es



17th March 2003

Dear Roger,

With reference to our recent offer we are wish to confirm in writing an Addendum to your Contract:

Intel acknowledges and consents that the Employee is holding a part-time position ("Titular Universidad 3+3") at Universitat Politecnica de Catalunya and will have to perform the duties associated with said position. Said duties shall not exceeed a teaching load of 3 hours per week and 3 hours of student mentoring per week. Said duties may not cause any conflict of interest with Intel.

All other conditions of your employment remain unchanged.

Please sign a copy of this letter as confirmation of acceptance of these new terms and return it to EMEA ESC.

Yours sincerely

Peter Conway

Employee Services Rep

Employee Name: Roger Espasa

Employee Signature:

Date:

MARCH

My intended Start Date is:

FERRUNRY 200

2005

Tel.: 34 91 432 90 90 Fax: 34 91 432 90 58 http://www.intel.es



EMPLOYMENT CONTRACT

BETWEEN:

FOR ONE PARTY, Mr Peter Conway, acting in the name and on behalf of INTEL CORPORATION IBERIA, S.A., (Hereinafter THE COMPANY).

AND FOR THE OTHER, Roger Espasa, acting on his own name and on his own behalf (hereinafter THE EMPLOYEE).

In the capacity in which they act, both parties mutually and reciprocally recognise each other to have the legal qualification and powers of representation to sign the present contract and, for this purpose, free and voluntary state that,

WHEREAS

By virtue of the present document, both parties agree to formalise a working relationship by signing an ordinary employment contract for an indefinite term, which shall be governed by the clauses of the present contract, by Royal Legislative Decree 1/1.995, of March 24TH, 1995 which approves the Implemented Text of the Worker's Statute, and ancillary, by the corresponding Collective Agreement or by other related legislation, and any current Labour and Social Security Legislation which may be applicable.

CLAUSES

FIRST.- TERM

The present contract is established for an indefinite term, starting on 24th February 2003.

SECOND.- PURPOSE

THE EMPLOYEE is employed in the position of Director.

As a Director, Roger Espasa is expected to undertake all acts, duties and obligations which are necessary to carry on his work, and comply with such orders as may be designated by THE COMPANY reasonably consistent with the above mentioned capacity.



THE EMPLOYEE shall comply with all THE COMPANY'S rules, regulations and policies and shall follow all the instructions received from any representative of THE COMPANY.

Not withstanding the above, according to Spanish law THE EMPLOYEE may be required at any time to perform any other different functions or to expand his duties, always related to the general scope of his professional position and grade (grado profesional) at THE COMPANY.

THIRD.- WORKING HOURS

THE EMPLOYEE shall render his services during forty hours per week (40) from Monday to Friday. Daily working hours are established from 8.30 to 18:00, from Monday to Thursday including an unpaid hour for lunch and from 8.30 to 15.00 on Friday including ½ for lunch.

Despite that, the distribution of working hours could be exceptionally changed by THE COMPANY if required for the performance of the functions stemming from the purpose of this contract or for the activity of THE COMPANY, and previously consulting THE EMPLOYEE and considering any reasonable objections, that he could make to this change.

THE EMPLOYEE could be required to work overtime in case it is needed for a favourable development of the activity of THE COMPANY.

FOURTH.- PLACE OF WORK

THE EMPLOYEE shall carry out his activity in Intel Labs located in Barcelona. However as INTEL is an International Company having offices throughout Europe and because of the nature of THE EMPLOYEE duties', he may be transferred to another department and/or place of work.

THE EMPLOYEE accepts to be temporary transferred to any of the EMPLOYER'S work centres and to make all the trips or journeys which may be necessary to appropriately fulfil his functions in national or International territory, whenever COMPANY'S objectives make it necessary.

THE COMPANY shall reimburse THE EMPLOYEE all reasonable travel and other out-ofpocket expenses incurred by him in the performance of his services, after being duly justified with the corresponding invoice and approved by THE COMPANY.





FIFTH.- REMUNERATION

The remuneration to be paid to THE EMPLOYEE is set out below:

1 GROSS BASIC ANNUAL SALARY

The EMPLOYEE'S initial basic gross salary shall be the sum of, per annum which amount shall be paid by the EMPLOYER to the EMPLOYEE in 14 monthly instalments in arrears payable by credit transfer to a bank of the EMPLOYEE'S choice. The EMPLOYEE'S salary will be reviewed according to Intel's standard review procedure.

EMPLOYEE BONUS

In his/her position as a Director, an on-target Employee Bonus is payable to the EMPLOYEE at an initial annual target of, **luros**. The terms and conditions governing the payment of this bonus are determined by the relevant Intel policy.

3 EMPLOYEE CASH BONUS PLAN

It is recorded that the EMPLOYER operates a world wide Employee Cash Bonus Plan (ECBP) and it is agreed and recorded that the EMPLOYEE will be eligible and entitled to participate in such plan.

4 **EXPENSES**

The EMPLOYEE will be reimbursed for any reasonable expenses properly incurred by him whilst performing his duties on behalf of the EMPLOYER subject to him conforming with the EMPLOYER'S published policy and procedure in regard to the incurrence and claiming of such expenses.

5 COMPANY CAR

In his position of Director, the employee is eligible to the Company Car Policy.

The EMPLOYEE acknowledges that the motor vehicle is attached to his position with the EMPLOYER and that should he be transferred to a new position in the employ of the EMPLOYER where he is no longer eligible for a company car he must return the same to the EMPLOYER within one month of his taking up his new position and that in the event of the EMPLOYEE being obliged to return the motor vehicle no additional compensation will be paid to him for the loss thereof. The motor vehicle aforesaid will at all times be the property of the EMPLOYER.





SIXTH.- HOLIDAYS

In addition to the official bank holidays, THE EMPLOYEE shall enjoy 22 remunerated working days each natural year. According to the Law, by natural year it must be understood that the year begins on January 1st and it finishes on December, 31st.

Four supplementary compensation days are granted for non-compressed working week.

The annual holiday entitlement will be increased to 23 working days after 5 years continuous service.

If the present work relationship begins or terminates without having completed a whole natural year, THE EMPLOYEE shall have the right to the days of holiday in proportion to the time worked during this natural year.

Holidays should be taken in accordance with the labour calendar established by THE COMPANY each year and previously approved by THE EMPLOYEE'S manager.

Holiday entitlement unused at the end of the holiday year can only be enjoyed during the following natural year in case of an urgent personal need of THE EMPLOYEE or in case of serious necessity of THE COMPANY. In both cases the previous approval of the Manager is required and any unused entitlement should be taken by March, 31st of the following natural year.

In case the Office would shut down at Christmas, annual holidays should be reserved for these days.

SEVENTH.- SICKNESS AND NOTIFICATION OF ABSENCE

The conditions for sick pay will be subjected to those established in the Spanish Legislation.

EIGHTH.- TERMINATION OF THE CONTRACT

If THE EMPLOYEE wishes to voluntarily terminate this contract, ONE (1) MONTH prior notice must be given to THE COMPANY.

THE COMPANY may extinguish the contract if justifiable legal causes can be evidenced.

THE EMPLOYEE shall return to THE COMPANY any document belonging to THE COMPANY, its parent Company, subsidiary and associated Companies, or to its customers, which he may be in possession of as a consequence of the services rendered, if THE COMPANY requires them, or if the termination of the services relationship takes place for whatever reason.

All documentation or material, such us inventions, patents, trade marks, designs, improvements which were in the hands of THE EMPLOYEE as a consequence of his services rendered, shall be returned to THE COMPANY as soon as his contract terminates or immediately upon request.





NINTH.- EXCLUSIVITY OF SERVICES

During the term of the present Contract, THE EMPLOYEE is not allowed to render his services to another company, which could be in conflict with the interests of THE COMPANY, being a private entity or a public entity, either by his own or by means of third parties, without having obtained previous authorisation from THE COMPANY in writing.

According to the above, THE EMPLOYEE may not, without the written consent of THE COMPANY, be in any way directly or indirectly actively engaged or concerned in any other business or undertaking where this is or likely to be in conflict with THE COMPANY interests.

Intel consent that the employee will teach one course per semester, on the basis that does not cause any conflict of interest with Intel.

TENTH.- COMPANY STANDARD POLICIES AND PROCEDURES

During his employment THE EMPLOYEE will be expected to comply with the COMPANY'S published policies and procedures, which are available to all employees.

ELEVENTH .- DATA PROTECTION

THE EMPLOYEE understands and accepts that all data related to his employment with THE COMPANY, and all other personal data supplied to Intel, may be centralised in a United States situated Human Resources (HR) Database. INTEL HR and selected management from other sites will have authorised and legitimate business access to this database, subjected to the limits of the Spanish Data Protection Legislation.

THE EMPLOYEE is entitled to access, review and request update to such information, as required.

Procedures for access to his own personal data are documented each site, and can be obtained from the HR department responsible for his site.

TWELFTH - VETTING CLAUSE

It is Intel's Policy to vet all new hires to the Company. The EMPLOYEE's employment is conditional upon verification of information contained in his/her Personal Details form and/or curriculum vitae and upon the receipt of references satisfactory to Intel. Falsification of data in any documentation, including but not limited to the EMPLOYEE's Personal Data Form and/or curriculum vitae may result in immediate termination of this contract.



intel

IN WITNESS WHEREOF, the parties have signed the present contract and ratified it in duplicate in the place and date stated at the beginning of the present document. And so that it be recorded, in proof and agreement it is signed and ratified by:

Roger Espasa acting on his own name and behalf

Date: 20 FEB 2003

Peter Conway acting in the name and on behalf of THE COMPANY

17th February 2003

R.E.

ASSIGNMENT

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

ROGER ESPASA; GUILLEM SOLE; DAVID GUILLEN FANDOS

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 other countries, in and to any and all inventions and improvements that are disclosed in the application for the patent entitled:

BIT SHUFFLE PROCESSORS, METHODS, SYSTEMS, AND INSTRUCTIONS

designated times betow, the ming date	and application number of	said appucation when know	n.)
which was filed onN	larch 02, 2017	as	
U.S. COUNTRY or International	Application Number	15/508,284	and

(I hereby authorize and request any attorney having appropriate authority from the assignee to insert on the

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 Additional Applications, and all other patent applications on any and all said inventions and improvements; execute all rightful oaths, assignments, powers of attorney, 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

Page 1 of 2

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.

Roger Espasa	Date signed
Guillem Sole	<u> </u>
David Guillen Fandos	Date signed

ASSIGNMENT

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

ROGER ESPASA; GUILLEM SOLE; DAVID GUILLEN FANDOS

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 other countries, in and to any and all inventions and improvements that are disclosed in the application for the patent entitled:

BIT SHUFFLE PROCESSORS, METHODS, SYSTEMS, AND INSTRUCTIONS

	t any attorney having appropriate		
designated lines below, the filling	ig date and application number of	said application when known.)	
which was filed on	March 02, 2017	as	
COUNTRY or Internal	Application Number	15/508,284	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 Additional Applications, and all other patent applications on any and all said inventions and improvements; execute all rightful oaths, assignments, powers of attorney, 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

Page 1 of 2

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.

Roger Espasa	Date signed
Guillem Sole	Date signed
	70 Nov 7014
David Guillen Fandos	Date signed

Page 2 of 2