

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT4100720

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
RAVI GUTALA	10/05/2016
ARIF RAHMAN	10/10/2016
ARAVIND DASU	10/05/2016
THOMAS SARVEY	10/10/2016
DEVDATTA KULKARNI	10/06/2016
RECEIVING PARTY DATA	
Name:	ALTERA CORPORATION
Street Address:	101 INNOVATION DRIVE
City:	SAN JOSE
State/Country:	CALIFORNIA
Postal Code:	95134
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	15274335
CORRESPONDENCE DATA	
Fax Number:	(650)300-2411
<i>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.</i>	
Email:	sjc@eecspatents.com
Correspondent Name:	STEVEN J. CAHILL/ ALTERA CORP.
Address Line 1:	P.O. BOX 779
Address Line 4:	MENLO PARK, CALIFORNIA 94026-0779
ATTORNEY DOCKET NUMBER:	101-13400US/A05208
NAME OF SUBMITTER:	STEVEN CAHILL
SIGNATURE:	/Steven Cahill/
DATE SIGNED:	10/17/2016
Total Attachments: 5	
source=AssignmentA05208#page1.tif	
source=AssignmentA05208#page2.tif	

source=AssignmentA05208#page3.tif

source=AssignmentA05208#page4.tif

source=AssignmentA05208#page5.tif

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, **Ravi Gutala**, of San Jose, CA, US; **Arif Rahman**, of San Jose, CA, US; **Aravind Dasu**, of Milpitas, CA, US; **Thomas Sarvey**, of US; and **Devdatta Kulkarni**, of US; hereinafter referred to as "Assignors," are the inventors of any and all new and useful improvements described and set forth in the below-identified application for United States Patent (hereinafter referred to as "Said Patent Application"):

Title of Patent Application: Fluid Routing Devices And Methods For Cooling Integrated Circuit Packages

Filing Date: September 23, 2016

Application No.: 15/274,335

WHEREAS, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by Assignors, Assignors hereby sell, assign, and transfer to **Altera Corporation**, a corporation of Delaware, having a principal place of business at 101 Innovation Drive, San Jose, California, USA 95134, (hereinafter referred to as "Assignee"), the entire right, title and interest in and to Said Patent Application, any and all improvements that are disclosed in Said Patent Application, and all foreign counterparts to Said Patent Application (including patent, utility model and industrial designs). The Assignors further sell, transfer, and assign to Assignee the entire right, title, and interest in and to any and all continuation applications, divisional applications, continued prosecution applications, international applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said improvements, and all other patent applications that have been or shall be filed in the United States and all foreign countries that claim priority to Said Patent Application; and in and to all original patents, reissued patents, registrations, reexamination certificates, and extensions, that have been or shall be issued in the United States and all foreign countries on said improvements; and in and to all rights of priority resulting from the filing of Said Patent Application; and to the right to file foreign applications directly in the name of Assignee and to claim for any such foreign applications any priority rights to which such applications are entitled under international conventions, treaties or otherwise.

The Assignors further agree that the Assignee may apply for and receive a patent or patents for said improvements in its own name; and that, when requested, without charge to said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the Assignors will execute all divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all of said improvements; execute all rightful oaths, declarations, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and representatives, all facts known to the Assignors relating to said improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements, and all applications for patents and all patents on said improvements, in said Assignee.

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

The Assignors hereby authorize and request the Officials of the United States Patent and Trademark Office and any and all foreign Patent Offices to issue any and all Patents, when granted, to said Assignee

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, **Ravi Gutala**, of San Jose, CA, US; **Arif Rahman**, of San Jose, CA, US; **Aravind Dasu**, of Milpitas, CA, US; **Thomas Sarvey**, of US; and **Devdatta Kulkarni**, of US; hereinafter referred to as "Assignors," are the inventors of any and all new and useful improvements described and set forth in the below-identified application for United States Patent (hereinafter referred to as "Said Patent Application"):

Title of Patent Application: Fluid Routing Devices And Methods For Cooling Integrated Circuit Packages

Filing Date:

Application No.:

WHEREAS, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by Assignors, Assignors hereby sell, assign, and transfer to **Altera Corporation**, a corporation of Delaware, having a principal place of business at 101 Innovation Drive, San Jose, California, USA 95134, (hereinafter referred to as "Assignee"), the entire right, title and interest in and to Said Patent Application, any and all improvements that are disclosed in Said Patent Application, and all foreign counterparts to Said Patent Application (including patent, utility model and industrial designs). The Assignors further sell, transfer, and assign to Assignee the entire right, title, and interest in and to any and all continuation applications, divisional applications, continued prosecution applications, international applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said improvements, and all other patent applications that have been or shall be filed in the United States and all foreign countries that claim priority to Said Patent Application; and in and to all original patents, reissued patents, registrations, reexamination certificates, and extensions, that have been or shall be issued in the United States and all foreign countries on said improvements; and in and to all rights of priority resulting from the filing of Said Patent Application; and to the right to file foreign applications directly in the name of Assignee and to claim for any such foreign applications any priority rights to which such applications are entitled under international conventions, treaties or otherwise.

The Assignors further agree that the Assignee may apply for and receive a patent or patents for said improvements in its own name; and that, when requested, without charge to said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the Assignors will execute all divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all of said improvements; execute all rightful oaths, declarations, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and representatives, all facts known to the Assignors relating to said improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements, and all applications for patents and all patents on said improvements, in said Assignee.

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

The Assignors hereby authorize and request the Officials of the United States Patent and Trademark Office and any and all foreign Patent Offices to issue any and all Patents, when granted, to said Assignee

Assignment
Attorney Docket No.: 101-13400US/A05208

as the assignee of the entire right, title, and interest in and to the same, for the sole use of said Assignee, its successors, and assigns, to the full end of the term for which said Patents may be granted.

Assignors hereby authorize and request The Law Office of Steven J. Cahill to insert herein above the application number and filing date of Said Patent Application when known.

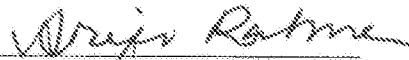
IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated: 05 Oct 2016



Ravi Gutala

Dated: 10/10/2016



Arif Rahman

Dated: 10/5/16



Aravind Dasu

Dated: _____

Thomas Sarvey

Dated: _____

Devdatta Kulkarni

Assignment
Attorney Docket No.: 101-13400US/A05208

as the assignee of the entire right, title, and interest in and to the same, for the sole use of said Assignee, its successors, and assigns, to the full end of the term for which said Patents may be granted.

Assignors hereby authorize and request The Law Office of Steven J. Cahill to insert herein above the application number and filing date of Said Patent Application when known.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated: _____

Ravi Gutala

Dated: _____

Arif Rahman

Dated: _____

Aravind Dasu

Dated: 10/10/16

Thomas Sarvey
Thomas Sarvey

Dated: _____

Devdatta Kulkarni

Assignment
Attorney Docket No.: 101-13400US/A05208

as the assignee of the entire right, title, and interest in and to the same, for the sole use of said Assignee, its successors, and assigns, to the full end of the term for which said Patents may be granted.

Assignors hereby authorize and request The Law Office of Steven J. Cahill to insert herein above the application number and filing date of Said Patent Application when known.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated: _____

Ravi Gutala

Dated: _____

Arif Rahman

Dated: _____

Aravind Dasu

Dated: _____

Thomas Sarvey

Dated: 10/06/2016

D. P. Kulkarni
Devdatta Kulkarni