PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: EXECUTIVE ORDER 9424, CONFIRMATORY LICENSE

CONVEYING PARTY DATA

Name	Execution Date
LAWRENCE LIVERMORE NATIONAL SECURITY, LLC	10/26/2010

RECEIVING PARTY DATA

Name:	U.S. Department of Energy	
Street Address:	1000 Independence Ave., SW	
City:	Washington	
State/Country:	DISTRICT OF COLUMBIA	
Postal Code:	20585	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12895347

CORRESPONDENCE DATA

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NAME OF SUBMITTER: Brenda K. Banks

Total Attachments: 1

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PATENT REEL: 025453 FRAME: 0556

CONFIRMATORY LICENSE

Title: Printed Circuit Board Impedance-Matching Step for Thick Substrate Broadband Microwave (Millimeter

Wave) Devices

Witness:

Inventor(s): Hsueh-yuan Pao, Paul D. Sargis, Jerardo Aguirre DOE Docket No.: \$-110,027 Dock Docket No./Sub: IL-11675/A

Contract Number: DE-AC52-07NA27344 U.S. Patent Application S.N.: 12/895347

Contractor: Lawrence Livermore National Security, LLC Filing Date: 09/30/10 Waiver No.: W(C) 92-002 Lawrence Livermore National Laboratory

Foreign patent applications filed or intended to be filed at contractor's expense in (countries):

The Contractor certifies that a true copy of the provisions which govern patent rights in "subject inventions" under the above-identified contract is herewith submitted or has been submitted to the U.S. Department of Energy by certification dated June 15, 1999.

WHEREAS, the above-identified invention is a subject invention under the above-identified contract;

WHEREAS, the above-identified Class Waiver of Government rights in certain identified inventions and the aboveidentified contract provides the Contractor with the right to elect to retain title in certain subject inventions and the Contractor has elected to retain title in the above-identified subject invention, EXCEPT FOR a paid-up license under the above-identified contract and the above-identified waiver.

ACCORDINGLY, the Contractor hereby confirms that under the provisions of the above-identified contract governing patent rights, it has granted to the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world. This license applies to the above-identified invention, the above-identified patent application(s), and any and all divisions or continuations thereof and any resulting patent or reissue patent which may be granted thereon.

The Government reserves for itself, and is hereby granted by the Contractor, the irrevocable power to inspect and make copies of the file wrapper(s) of the above-identified U.S. patent application and of any related or continuation patent application(s), whether domestic or foreign, for the above-identified invention.

It is understood and agreed that this instrument does not preclude the Government from asserting rights under the provisions of the above-identified contract or any other agreement between the Government and the Contractor, or any other rights of the Government with respect to the above-identified invention.

Signed on behalf of: LAWRENCE LIVERMORE NATIONAL SEC (Contractor)

Marcos Garcia, Patent Administrator

10/26/2010 Mark H. Lough, Debuty General Counsel

Lawrence Livermore National Laboratory

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PATENT REEL: 025453 FRAME: 0557

RECORDED: 12/09/2010