

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT4627049

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
G,R, MOHAN RAO	04/27/2015
RECEIVING PARTY DATA	
Name:	GREENTHREAD, LLC
Street Address:	4544 HARRYS LANE
City:	DALLAS
State/Country:	TEXAS
Postal Code:	75229-5400
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	15590282
CORRESPONDENCE DATA	
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<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>	
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Correspondent Name:	GREGORY M. HOWISON
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ATTORNEY DOCKET NUMBER:	GRTD60-33439
NAME OF SUBMITTER:	GREGORY M. HOWISON
SIGNATURE:	/Gregory M. Howison, Reg. #30646/
DATE SIGNED:	10/04/2017
Total Attachments: 4	
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ASSIGNMENT

WHEREAS, G.R. MOHAN RAO, an individual, residing at 1611 Willingham Drive, Allen, Texas 75013 ("Assignor"), has invented certain new and useful inventions set forth on the attached Exhibit A (collectively, the "Inventions"), for which certain applications for United States and foreign patents were filed as set forth on Exhibit A (collectively, the "Applications"), and from which certain United States patents have issued as set forth on Exhibit A (collectively, the "Patents"); and

WHEREAS, GREENTHREAD, LLC, a Texas Limited Liability Company, having a business address at 4544 Harrys Lane, Dallas, Texas 75229-5400 ("Assignee"), is desirous of acquiring the entire right, title, and interest in and to the Applications and Patents and any and all foreign counterparts, divisions, continuations, continuation-in-parts, improvements, reexaminations, reissues, extensions, renewals, substitutes, provisional applications, certificates, all rights under the International Convention for the Protection of Industrial Property and prolongations of the Applications and Patents.

Now, THEREFORE, for other good and valuable consideration, Assignor, by these presents does hereby irrevocably sell, assign, and transfer unto Assignee, its successors, assigns, and legal representatives the full and exclusive right in and to:

- (a) the Applications and Patents in the United States and the entire right, title, and interest in and to any and all issued patents or patent applications which may be granted therefor and/or therefrom in the United States, to all divisions, reissues, substitutions, continuations, continuations-in-part, and extensions of said Applications and Patents and any pending applications or issued patents that directly claim or are amended to claim priority to any of the Applications or Patents;
- (b) all causes of action (whether known or unknown or whether currently pending, filed or otherwise) and other enforcement rights under or on account of the Applications and Patents, including without limitation all causes of action and other enforcement rights for damages, injunctive relief, and any other remedies of any kind for past, current and future infringement; and
- (c) all rights to collect royalties or other payments under or on account of the Applications and Patents and the foregoing subcategory (b).

Assignor hereby authorizes and requests the Commissioner of Patents and Trademarks to issue all patents for the Applications, or patents resulting therefrom, insofar as Assignor's interests are concerned, to Assignee, of the entire right, title, and interest in and to the same, for its sole use and benefit; and for the use and benefit of its legal representatives, to the full end of the term for which said patents may be granted, as fully and entirely as the same would have been held by the Assignor had this assignment not been made.

Assignor also sells and assigns to Assignee, its successors, assigns and legal representatives the full and exclusive right, title, and interest in and to the Inventions disclosed in

said Applications throughout the world, including the right to file applications and obtain patents, utility models, industrial models, and designs for the inventions in the Assignee's own name throughout the world, including all rights of priority, all rights to publish cautionary notices reserving ownership of the inventions and all rights to register the inventions in appropriate registries, all foreign rights arising from pre-grant publication of the Applications; and Assignor further agrees to execute any and all powers of attorney, applications, assignments, declarations, affidavits, and any other papers in connection therewith necessary to perfect such right, title and interest in Assignee, its successors, assigns and legal representatives.

Assignor further agrees to communicate to Assignee, its successors, assigns and/or legal representatives, any known facts respecting any improvements, and, at the expense of Assignee, to testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and substitute applications, make all lawful oaths, and generally do everything possible to vest title in Assignee and to aid Assignee, its successors, assigns and legal representatives to obtain and enforce proper protection for the Inventions in all countries.

[Signature Page to Follow]

G.R. Mohan Rao
G.R. Mohan Rao

April 27, 2015
Date

STATE OF: Texas §

COUNTY OF: Dallas §

BEFORE ME, a Notary Public, on this 27th day of April, 2015, personally appeared G.R. MOHAN RAO, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed same of his/her own free will for the purposes and consideration therein expressed.

[SEAL]

Kristy Lea Kyles
Notary Public
Commission Expires: 9-9-17

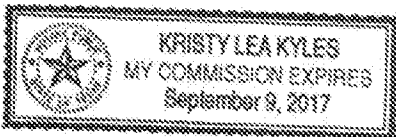


EXHIBIT A

	Atty. Ref.	Country	Serial No.	Patent No.	Title
1.	32625	US	10/934,915		Semiconductor Devices with Graded Dopant Regions
2.	32611	US	11/622,496	8,421,195	Semiconductor Devices with Graded Dopant Regions
3.	32612	US	12/549,283	8,106,481	Semiconductor Devices with Graded Dopant Regions
4.	32626	US	13/854,319		Semiconductor Devices with Graded Dopant Regions
5.	32613	US	14/515,584		Semiconductor Devices with Graded Dopant Regions
6.	32623	US	60/982,175		Nonvolatile Memory Systems with Embedded Fast Read and Write Memories
7.	32614	US	12/256,362	7,855,916	Nonvolatile Memory Systems with Embedded Fast Read and Write Memories
8.	32615	US	12/915,177	8,194,452	Nonvolatile Memory Systems with Embedded Fast Read and Write Memories
9.	32616	US	13/458,173	8,531,880	Nonvolatile Memory Systems with Embedded Fast Read and Write Memories
10.	32617	US	13/967,649	8,817,537	Nonvolatile Memory Systems with Embedded Fast Read and Write Memories
11.	32618	US	14/335,160		Nonvolatile Memory Systems with Embedded Fast Read and Write Memories
12.	32624	US	61/509,257		Lifetime Mixed Level Non-Volatile Memory System
13.	32619	US	13/455,267	8,891,298	Lifetime Mixed Level Non-Volatile Memory System
14.	32620	US	14/525,411		Lifetime Mixed Level Non-Volatile Memory System