

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		16947294
	Filing Date		2020-07-27
	First Named Inventor	G.R. Mohan Rao	
	Art Unit	2892	
	Examiner Name	ARORA, AJAY	
	Attorney Docket Number	GRTD60-35294	

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	3	4688063	A	1987-08-18	Lu et al.	
	4	4907058	A	1990-03-06	Sakai	
	5	4994887	A	1991-02-19	Hutter et al.	
	6	5835402	A	1998-11-10	Rao et al.	
	7	6025237	A	2000-02-15	Choi	
	8	6384431	B1	2002-05-07	Takahashi et al.	

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9	6465862	B1	2002-10-15	Harris
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	3	20030183856	A1	2003-10-02	Wieczorek et al.	
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	1	2003051551	JP	A	2003-02-21	Miyamoto et al.		×

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2	2003218356	JP	A	2003-07-31	Matsumoto et al.	☒
3	6482563	JP	A	1989-03-28	Kondo	☒
4	2004049453	WO	A1	2004-06-10	Zheng et al.	☐

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NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
	1	IPR2020-00288-Exhibit 1029-Claim Construction District Court 4 20-2020	
	2	IPR2020-00288-Exhibit 2007-Minutes for Markman Hearing Held Via Video Conference Before U.S. District Judge Rodney Gilstrap, Greenthread, LLC v. Samsung Electronics Co., Ltd., et al., Case No. 2:19-CV-147-JRG, Dkt. 61	
	3	IPR2020-00288-Petitioner Reply	
	4	IPR2020-00289-00289 Petitioner Reply	
	5	IPR2020-00292 - Petition for IPR	
	6	IPR2020-00292-Exhibit 2002-Excerpt from Exhibit 4 to Appendix B of Samsung Electronics Co., Ltd.'s Invalidity Contentions (Invalidity Contention based on U.S. Patent No. 6,384,431 to Takahashi	

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7	IPR2020-00288 - Ex. 1020 - Michael Nastasi and James W. Mayer, Ion Implantation and Synthesis of Materials (2006). 4 pages
8	IPR2020-00288-Exhibit 2001 - IPR2020-00288 - Excerpt from Exhibit 1 to Appendix A of Samsung Electronics Co., Ltd.'s Invalidity Contentions regarding Morris
9	IPR2020-00288-Exhibit 2002-xcerpt from Exhibit 2 to Appendix A of Samsung Electronics Co., Ltd.'s Invalidity Contentions regarding Miyamoto
10	IPR2020-00288-Exhibit 2009-Complaint for Patent Infringement, Greenthread, LLC v. Samsung Electronics Co., Ltd., et al., Case No. 2:19-CV-147-JRG, Dkt. 1
11	IPR2020-00288-Exhibit 2011- Exhibit A to Revised Joint Claim Construction Chart Pursuant to Patent Rule 4-5, Greenthread, LLC v. Samsung Electronics Co., Ltd., et al., Case No. 2:19-CV-147-JRG, Dkt. 60-1
12	IPR2020-00288-Exhibit 2012-Samsungs Responsive Claim Construction Brief - District Court
13	IPR2020-00288-Exhibit 2013- Glew Dec
14	IPR2020-00288-Exhibit 2014- Excerpt from Exhibit 10 to Appendix A of Samsung Electronics Co., Ltd.'s Invalidity Contentions
15	IPR2020-00288-Patent Owner Preliminary Response
16	IPR2020-00288-Patent Owner Sur Reply
17	IPR2020-00288-Petition

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18	PR2020-00289-Exhibit 1 to Appendix C of Samsung Electronics Co., Ltd.'s Invalidity Contentions regarding Payne
19	PR2020-00289-Exhibit 1003-Smith Dec
20	PR2020-00289-Exhibit 1010- S. M. Sze et al., Semiconductor Devices: Physics and Technology, John Wiley & Sons, 2nd Ed., 2002 ("Sze '02")
21	PR2020-00289-Exhibit 1012-Ben G. Streetman, Solid State Electronic Devices, 2nd Ed., Prentice-Hall, 1980 ("Streetman")
22	PR2020-00289-Exhibit 2001-Exhibit 1 to Appendix C of Samsung Electronics Co., Ltd.'s Invalidity Contentions regarding Payne
23	PR2020-00289-Exhibit 2002- Exhibit 3 to Appendix C of Samsung Electronics Co., Ltd.'s Invalidity Contentions regarding Wieczorek
24	PR2020-00289-Exhibit 2011-Behzad Razavi, Design of Analog CMOS Integrated Circuits, 2001 ("Razavi")
25	PR2020-00289-Exhibit 2012-Excerpts from Wolf, S., Silicon Processing for the VLSI Era, Vol.4 - Deep-Submicron Process Technology (2002) ("Wolf Vol. 4")
26	PR2020-00289-Exhibit 2013-Glew Dec
27	PR2020-00289-Patent Owner Pre Resp
28	PR2020-00289-Patent Owner Sur reply

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29	PR2020-00289-Petition
30	PR2020-00290-Exhibit 1003-Declaration of Dr. Bruce Smith
31	PR2020-00290-Exhibit 1013-Tango, Mega bit Memory Technology
32	PR2020-00290-Patent Owner Preliminary Resp
33	PR2020-00290-Patent Owner Sur Reply
34	PR2020-00290-Petition
35	PR2020-00290-Petitioners Reply to Patent Owner Preliminary Response
36	PR2020-00291-Exhibit 1003-Declaration of Dr. Bruce Smith
37	PR2020-00291-Exhibit 1011- The Insulated Gate Bipolar Transistor: IGBT Theory and Design, Vinod Kumar Khanna, IEEE Press and Wiley-Interscience, 2003
38	PR2020-00291-Exhibit 1020-S. M. Sze, Physics of Semiconductor Devices, Wiley-Interscience, 2nd Ed., 1981 ("Sze '81")
39	PR2020-00291-Exhibit 1021-S. M. Sze, Semiconductor Devices: Physics and Technology, John Wiley & Sons, 2nd Ed., 2002 ("Sze '02")

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40	PR2020-00291-Exhibit 2001-Exhibit 2 to Appendix B of Samsung Electronics Co., LTD's Invalidity Contentions (Invalidity Contention based on U.S. Patent Application Publication No. 2002/0195656 ("Hattori"))
41	PR2020-00291-Exhibit 2013- Declaration of Dr. Alexander D. Glew
42	PR2020-00291-Patent Owner Preliminary Resp
43	PR2020-00291-Patent Owner Sur Reply
44	PR2020-00291-Petition
45	PR2020-00291-Petitioners Reply
46	PR2020-00292-Exhibit 1003-Declaration of Dr. Bruce Smith
47	PR2020-00292-Exhibit 2001-Excerpt from Exhibit 1 to Appendix B of Samsung Electronics Co., Ltd.'s Invalidity Contentions (Invalidity Contention based on "Insulated Gate Bipolar Transistor IGBT Theory and Design" by Vinod Kumar Khanna
48	PR2020-00292-Exhibit 2012-Excerpt from Exhibit A to Joint Claim Construction Chart Pursuant to Patent Rule 4-5, Greenthread, LLC v. Samsung Electronics Co., Ltd., et al., Case No. 2:19-CV-147-JRG, Dkt. 53-1 (Mar. 18, 2020)
49	PR2020-00292-Patent Owner Preliminary Response

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EXAMINER SIGNATURE

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CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Gregory M. Howison, Reg. #30646/	Date (YYYY-MM-DD)	2021-06-24
Name/Print	Gregory M. Howison	Registration Number	30646

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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