PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CHU KEONG GERARD JOSEPH LIM	03/07/2022
CHANDRASEKHAR MURAPAKA	03/07/2022
WEN SIANG LEW	03/07/2022

RECEIVING PARTY DATA

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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17773945

CORRESPONDENCE DATA

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Email: shari.elofson@wbd-us.com LAUREN F. ANDERSON **Correspondent Name:** Address Line 1: 555 FAYETTEVILLE STREET

Address Line 2: **SUITE 1100**

Address Line 4: RALEIGH, NORTH CAROLINA 27601

ATTORNEY DOCKET NUMBER:	N103471 1150US.PCT(0017.2	
NAME OF SUBMITTER:	LAUREN F. ANDERSON	
SIGNATURE:	/lauren f. anderson/	
DATE SIGNED:	05/26/2022	

Total Attachments: 6

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PATENT REEL: 060032 FRAME: 0698 Attorney Docket No. N103471 1150US.PCT (0017.2)

COMBINED WORLDWIDE INVENTION ASSIGNMENT AND U.S. DECLARATION (37 CFR 1.63)

WHEREAS, the undersigned (hereinafter collectively referred to as "Assignor") has or may have invented certain inventions and improvements disclosed in the United States patent application entitled "MAGNETIC LOGIC DEVICE, CIRCUIT HAVING MAGNETIC LOGIC DEVICES, AND METHODS FOR CONTROLLING THE MAGNETIC LOGIC DEVICE AND THE CIRCUIT" and designated as

- Application No. 17/773,945; filed May 3, 2022
 (We hereby authorize and request the Assignee and its Attorney, Womble Bond Dickinson (US)
 LLP, to insert the filing date and application number of said application when known).
- Application is a U.S. National Stage filing of International Application No. PCT/SG2020/050626, filed November 2, 2020, which claims priority from Singapore Application No. 10201910275V, filed November 5, 2019, all applications listed above being hereinafter referred to as the "Application(s)":

WHEREAS, it is agreed that

Nanyang Technological University 50 Nanyang Avenue Singapore 639798

(hereinafter referred to as "Assignee"), is entitled to or is desirous of acquiring all right, title and interest related to the same;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor, by these presents, does sell, assign, and transfer unto Assignee the full, exclusive and entire right, title and interest, worldwide: (i) in and to all inventions and improvements disclosed and described in the Application(s); (ii) in and to said Application(s) and any other United States national stage, provisional, non-provisional, divisional, continuation, continuation-in-part, or design patent applications based in whole or in part upon said inventions or improvements and/or claiming priority to said Application(s) (the "U.S. Applications"); (iii) in and to any Patent Cooperation Treaty applications based in whole

PATENT REEL: 060032 FRAME: 0699 or in part upon said inventions or improvements and/or claiming priority to said Application(s); (iv) in and to any and all applications for industrial property protection, including without limitation applications for patent, utility model, inventor's certificate, and design, filed or which are hereafter filed in countries outside the United States (the "Foreign Applications") and which describe in whole or in part said inventions and improvements, said Foreign Applications to be filed and issued in the name of Assignee or its designee insofar as permitted by applicable law; (v) in and to all patents or similar protective rights in the United States or elsewhere which may be granted on the U.S. Applications and Foreign Applications and all reissues, reexaminations, and extensions thereof, any and all such patents or other protective rights to issue in the name of Assignee and for the sole use and behoof of Assignee and its successors and assigns; and (vi) in and to the right to claim any applicable foreign or domestic priority rights arising from or required for any of the aforementioned applications under the terms of any applicable conventions, treaties, statutes, or regulations.

AND, for the same consideration, Assignor agrees to (i) communicate to Assignee, its successors, legal representatives, and assigns, any facts known to Assignor respecting said inventions and improvements or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may embody said inventions or improvements; (ii) sign or execute all lawful papers, applications, declarations, affidavits, assignments, and rightful oaths that may be requested by Assignee during prosecution or enforcement of any rights related to the inventions and improvements; (iii) testify in any proceedings relating to said inventions or improvements or rights granted therefor; and (iv) generally do everything possible to aid Assignee and its successors, legal representatives and assigns, to obtain and enforce proper protection for all said inventions and improvements in all countries throughout the world.

Assignor covenants with Assignee, its successors, legal representatives, and assigns, that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned. Assignor further agrees that Assignee, its successors, legal representatives, and assigns, may insert into this Assignment any further text necessary or desirable to define the Applications to which the Assignment pertains for purposes of recordation, and also agrees that the Assignment is effective at least as early as June 7, 2018 the earliest priority date of the Application(s).

<u>U.S. DECLARATION</u>: Assignor intends for this Assignment to serve as a U.S. declaration under 37 CFR 1.63(e)(1). Accordingly, with respect to the U.S. Applications identified herein, each undersigned inventor hereby declares that: (1) the above-identified application was made or authorized to be made by me; (2) I believe that I am the original inventor or an original joint inventor of a claimed invention in the application; and (3) I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

[SIGNATURE PAGES FOLLOW]

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07/03/22	
Date	LIM CHU KEONG GERARD JOSEPH

WITNESSES:

(Signature of Witness)

Calvin Ang

(Typed Name of Witness)

(Signature of Witness)

Henry Kwang

(Typed Name of Witness)

m. chandrasocher

Date

MURAPAKA CHANDRASEKHAR

WITNESSES:

(Signature of Witness)

Talluri Manoj (Typėd Name of Witness)

(Signature of Witness

Sriram Kasilingam (Typed Name of Witness)

7 March 2022	lighting
Date	LEW WEN SIANG
	WITNESSES:
	(Signature of Witness) Calvin Ang
	(Typed Name of Witness)
	Lofe
	(Signature of Witness)
	Henry Kwang
	(Typed Name of Witness)

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RECORDED: 05/26/2022