508389446 02/14/2024

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 Assignment ID: PATI28204

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
FIRST QUANTUM INC.	02/05/2024

RECEIVING PARTY DATA

Company Name:	UNIVERSITY OF SEOUL INDUSTRY COOPERATION FOUNDATION
Street Address:	163 SEOULSIRIPDAE-RO, DONGDAEMUN-GU
City:	SEOUL
State/Country:	KOREA, REPUBLIC OF

PROPERTY NUMBERS Total: 4

Property Type	Number
Patent Number:	10133959
Patent Number:	10630469
Patent Number:	10637660
Patent Number:	10644883

CORRESPONDENCE DATA

Fax Number:

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.

Phone: 7745820020

Email: jay.peck@uonelaw.com

Correspondent Name: Jhongwoo Peck Address Line 1: P.O. Box 4648

Address Line 4: New York, NEW YORK 10185

ATTORNEY DOCKET NUMBER:	IPC-P30004-P30007
NAME OF SUBMITTER:	Jhongwoo Peck
SIGNATURE:	Jhongwoo Peck
DATE SIGNED:	02/14/2024

Total Attachments: 6

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> PATENT REEL: 066466 FRAME: 0036

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> PATENT REEL: 066466 FRAME: 0037

ASSIGNMENT

WHEREAS,

- **FIRST QUANTUM INC.**, a corporation of Republic of Korea, located at #210, 180, Bangbae-ro, Seocho-gu, Seoul, Republic of Korea (hereinafter "ASSIGNOR") is the owner of the entire right, title and interest in:
 - U.S. Patent No. **10,133,959** issued on November 20, 2018 (Application No. 15/293,460 filed on October 14, 2016), entitled "MACHINE VISION SYSTEM USING QUANTUM MECHANICAL HARDWARE BASED ON TRAPPED ION SPIN-PHONON CHAINS AND ARITHMETIC OPERATION METHOD THEREOF":
 - U.S. Patent No. **10,630,469** issued on April 21, 2020 (Application No. 15/655,420 filed on July 20, 2017), entitled "MOBILE DEVICE HAVING QUANTUM CRYPTOGRAPHIC SECURITY FUNCTION FOR MOBILE COMMERCE, AND AUTHENTICATION METHOD";
 - U.S. Patent No. **10,637,660** issued on April 28, 2020 (Application No. 15/655,485 filed on July 20, 2017), entitled "SECURE PAYMENT AND AUTHENTICATION SYSTEM HAVING SECURITY FUNCTION ENHANCED BY USING QUANTUM CRYPTOGRAPHY"; and
 - U.S. Patent No. **10,644,883** issued on May 5, 2020 (Application No. 15/655,323 filed on July 20, 2017), entitled "MOBILE COMMERCE AND AUTHENTICATION METHOD HAVING IMPROVED SECURITY BASED ON QUANTUM CRYPTOGRAPHY"

(hereinafter "PATENTS"),

WHEREAS,

UNIVERSITY OF SEOUL INDUSTRY COOPERATION FOUNDATION, a foundation of Republic of Korea, located at 163 Seoulsiripdae-ro, Dongdaemun-gu Seoul, Republic of Korea (hereinafter "ASSIGNEE") is desirous of acquiring the entire right, title and interest in said PATENTS and the invention disclosed therein,

NOW, THEREFORE, for good and valuable consideration paid, the receipt of which is hereby acknowledged, ASSIGNOR does hereby sell, assign and transfer unto ASSIGNEE, its successors and assigns, the entire interest in any and all of the following:

- (i) the PATENTS and the invention disclosed therein;
- (ii) all reissues, divisionals, continuations, continuation-in-parts, extensions, renewals, reexaminations and foreign counterparts thereof, and other patents, patent applications, certificate of invention other governmental grants resulting from the PATENTS:

- (iii) all patents and patent applications which claim priority to or have common disclosure or common priority with the PATENTS;
- (iv) all rights corresponding to any of the foregoing throughout the world (including the right to claim the priority date of the PATENTS); and
- (v) the right to sue for and recover damages for any past, present or future infringement of the PATENTS, and/or any item in any of the foregoing categories (ii)-(iv).

In witness whereof, we hereunto set this Assignment to be executed, and agree to be legally bound thereby, as of the dates indicated below.

ASSIGNOR

FIRST QUANTUM INC.

Signature: JUNEAU PARK

Title: Advisor

Date: 2.5.2024

ASSIGNEE

UNIVERSITY OF SEOUL INDUSTRY COOPERATION FOUNDATION

Signature	
Name	•
Title	:
Date	:

ASSIGNMENT

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ASSIGNOR

FIRST QUANTUM INC.

Signature	:
Name	: <u> </u>
Title	:
Date	:

ASSIGNEE

RECORDED: 02/14/2024

UNIVERSITY OF SEOUL INDUSTRY COOPERATION FOUNDATION

Signature	: 2	anda Chung.
Name	:⊈	YUNDOO CHUNG
Title	:	President
Date	:	31/01/2024