

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
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EPAS ID: PAT8077364

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the RECEIVING PARTY DATA NAME FROM "IDEAHUB" TO "IDEAHUB INC." previously recorded on Reel 063917 Frame 0456. Assignor(s) hereby confirms the PATENT ASSIGNMENT.

CONVEYING PARTY DATA

Name	Execution Date
ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE	04/11/2023

RECEIVING PARTY DATA

Name:	IDEAHUB INC.
Street Address:	251, GANGNAM-DAERO, SEOCHO-GU
Internal Address:	10F
City:	SEOUL
State/Country:	KOREA, REPUBLIC OF
Postal Code:	06735

PROPERTY NUMBERS Total: 20

Property Type	Number
Application Number:	12976346
Application Number:	14553602
Application Number:	14553664
Application Number:	15439322
Application Number:	16236851
Application Number:	16598846
Application Number:	16598899
Application Number:	16598534
Application Number:	16598512
Application Number:	17182368
Application Number:	13808433
Application Number:	15489290
Application Number:	15801423
Application Number:	16235878
Application Number:	16236019
Application Number:	17027866
Application Number:	17580810

PATENT

Property Type	Number
Application Number:	13876938
Application Number:	16908607
Application Number:	17989917

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: +821028315786
Email: francis@ideahub.co.kr
Correspondent Name: KEUNSOO MOON
Address Line 1: 22, MAPO-DAERO 7-GIL, MAPO-GU
Address Line 2: 310-1002
Address Line 4: SEOUL, KOREA, REPUBLIC OF 04142

NAME OF SUBMITTER:	KEUNSOO MOON
SIGNATURE:	/KEUNSOO MOON/
DATE SIGNED:	07/26/2023

Total Attachments: 9
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PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT8000480

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT	
NATURE OF CONVEYANCE:	Corrective Assignment to correct the CONVEYING PARTY DATA NAME FROM "IDEAHUB" TO "ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE" previously recorded on Reel 063321 Frame 0082. Assignor(s) hereby confirms the PATENT ASSIGNMENT.	
RESUBMIT DOCUMENT ID:	507866518	
CONVEYING PARTY DATA		
Name		Execution Date
ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE		04/11/2023
RECEIVING PARTY DATA		
Name:	IDEAHUB	
Street Address:	251, GANGNAM-DAERO, SEOCHO-GU	
Internal Address:	10F	
City:	SEOUL	
State/Country:	KOREA, REPUBLIC OF	
PROPERTY NUMBERS Total: 20		
Property Type	Number	
Application Number:	12976346	
Application Number:	14553602	
Application Number:	14553664	
Application Number:	15439322	
Application Number:	16236851	
Application Number:	16598846	
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Application Number:	16598534	
Application Number:	16598512	
Application Number:	17182368	
Application Number:	13808433	
Application Number:	15489290	
Application Number:	15801423	
Application Number:	16235878	
Application Number:	16236019	
Application Number:	17027866	
Application Number:	17580810	

Property Type	Number
Application Number:	13876938
Application Number:	16908607
Application Number:	17989917

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: 01028315786
Email: francis@ideahub.co.kr
Correspondent Name: KEUNSOO MOON
Address Line 1: 22, MAPO-DAERO 7-GIL, MAPO-GU
Address Line 2: 310-1002
Address Line 4: SEOUL, KOREA, REPUBLIC OF 04142

NAME OF SUBMITTER:	KEUNSOO MOON
SIGNATURE:	/KEUNSOO MOON/
DATE SIGNED:	06/12/2023

Total Attachments: 4
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PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
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EPAS ID: PAT7900946

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
IDEAHUB	04/11/2023

RECEIVING PARTY DATA

Name:	IDEAHUB
Street Address:	251, GANGNAM-DAERO, SEOCHO-GU, SEOUL, REPUBLIC OF KOREA
Internal Address:	10F
City:	SEOUL
State/Country:	KOREA, REPUBLIC OF
Postal Code:	06735

PROPERTY NUMBERS Total: 20

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Application Number:	15489290
Application Number:	15801423
Application Number:	16235878
Application Number:	16236019
Application Number:	17027866
Application Number:	17580810
Application Number:	13876938
Application Number:	16908607

PATENT ASSIGNMENT

This Patent Assignment (this "*Assignment*"), is made and entered into as of April 11, 2023 (the "*Effective Date*"), by Electronics And Telecommunications Research Institute, having a place of business at 218 Gajeong-ro, Yuseong-gu, Daejeon-si, Republic of Korea ("*Assignor*"), with respect to the assignment of certain patent assets to IDEAHUB Inc., having a place of business at 10F, 251 Gangnam-daero, Seocho-gu, Seoul, Republic of Korea ("*Assignee*").

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor agrees as follows:

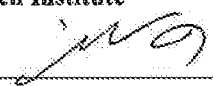
Assignor does hereby assign and transfer and convey unto Assignee its entire right, title and interest in and to the Assigned Patents listed in Appendix I hereto, including Assignor's rights under the Assigned Patents to sue for injunctive relief and damages for past, present and future infringement of the Assigned Patents.

Assignor hereby authorizes the respective patent office or governmental agency to record the Assigned Patents and any reissues or reexaminations thereof in the name of Assignee, as the assignee of the entire interest therein.

IN WITNESS WHEREOF, Assignor has caused this Assignment to be executed by its respective duly authorized representative as of the Effective Date.

Assignor

Electronics And Telecommunications
Research Institute

By: 

Name:

Jang Siu Choi

Title:

Director

Assignee

IDEAHUB Inc.

By: 

Name:

YANG-LAN Jung

Title:

EXECUTIVE VICE PRESIDENT

Appendix I LISTED PATENTS

No	Family	Country	Application No.	Filing Date	Patent No.	Issued Date	Status	Title
1	1	US	12/976346	2010-12-22	8953686	2015-02-10	Issued	Image encoding/decoding apparatus and method
2	1	US	14/553602	2014-11-25	9602832	2017-03-21	Issued	Image encoding/decoding apparatus and method
3	1	US	14/553664	2014-11-25	9363528	2016-06-07	Issued	Image encoding/decoding apparatus and method
4	1	US	15/439322	2017-02-22	10212448	2019-02-19	Issued	Image encoding/decoding apparatus and method
5	1	US	16/236851	2018-12-31	10484706	2019-11-19	Issued	Image encoding/decoding apparatus and method
6	1	US	16/598846	2019-10-10	10958933	2021-03-23	Issued	Image encoding/decoding apparatus and method
7	1	US	16/598899	2019-10-10	10965953	2021-03-30	Issued	Image encoding/decoding apparatus and method
8	1	US	16/598534	2019-10-10	10798409	2020-10-06	Issued	Image encoding/decoding apparatus and method
9	1	US	16/598512	2019-10-10	10965952	2021-03-30	Issued	Image encoding/decoding apparatus and method
10	1	US	17/182,368	2021-02-23	11516498	2022-11-29	Issued	Image encoding/decoding apparatus and method
11	2	US	13/808433	2011-08-17	9699449	2017-07-04	Issued	Method and apparatus for encoding video, and decoding method and apparatus based on quantization parameter

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Patent Transfer Agreement

12	2	US	15/489290	2017-04-17	9838691	2017-12-05	Issued	Method and apparatus for encoding video, and decoding method and apparatus
13	2	US	15/801423	2017-11-02	10212422	2019-02-19	Issued	Method and apparatus for encoding video, and decoding method and apparatus
14	2	US	16/235878	2018-12-28	10939106	2021-03-02	Issued	Method and apparatus for encoding video, and decoding method and apparatus
15	2	US	16/236019	2018-12-28	10827174	2020-11-03	Issued	Method and apparatus for encoding video, and decoding method and apparatus
16	2	US	17/027866	2020-09-22	11265546	2022-01-03	Issued	Method and apparatus for encoding video, and decoding method and apparatus
17	2	US	17/580810	2022-01-21			Pending	Method and apparatus for encoding video, and decoding method and apparatus
18	3	US	13/876938	2011-09-29	9363533	2016-06-07	Issued	Method and apparatus for video-encoding/decoding using filter information prediction
19	3	US	16/908607	2020-06-22	RE49308	2022-11-22	Issued	Method and apparatus for video-encoding/decoding using filter information prediction
20	3	US	17/989,917	2022-11-18			Pending	Method and apparatus for video-encoding/decoding using filter information prediction

PATENT ASSIGNMENT

This Patent Assignment (this "*Assignment*"), is made and entered into as of April 11, 2023 (the "*Effective Date*"), by Electronics And Telecommunications Research Institute, having a place of business at 218 Gajeong-ro, Yuseong-gu, Daejeon-si, Republic of Korea ("*Assignor*"), with respect to the assignment of certain patent assets to IDEAHUB Inc., having a place of business at 10F, 251 Gangnam-daero, Seocho-gu, Seoul, Republic of Korea ("*Assignee*").

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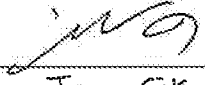
Assignor does hereby assign and transfer and convey unto Assignee its entire right, title and interest in and to the Assigned Patents listed in Appendix I hereto, including Assignor's rights under the Assigned Patents to sue for injunctive relief and damages for past, present and future infringement of the Assigned Patents.

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Assignor

Electronics And Telecommunications
Research Institute

By: 
Name: Jang Siu Choi
Title: Director

Assignee

IDEAHUB Inc.

By: 
Name: YANG-LAN Jung
Title: EXECUTIVE VICE PRESIDENT

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Patent Transfer Agreement

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13	2	US	15/801423	2017-11-02	10212422	2019-02-19	Issued	Method and apparatus for encoding video, and decoding method and apparatus
14	2	US	16/235878	2018-12-28	10939106	2021-03-02	Issued	Method and apparatus for encoding video, and decoding method and apparatus
15	2	US	16/236019	2018-12-28	10827174	2020-11-03	Issued	Method and apparatus for encoding video, and decoding method and apparatus
16	2	US	17/027866	2020-09-22	11265546	2022-01-03	Issued	Method and apparatus for encoding video, and decoding method and apparatus
17	2	US	17/580810	2022-01-21			Pending	Method and apparatus for encoding video, and decoding method and apparatus
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19	3	US	16/908607	2020-06-22	RE49308	2022-11-22	Issued	Method and apparatus for video-encoding/decoding using filter information prediction
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