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PATENT

REEL: 014888 FRAME: 0039

| (Ray 10/02 madified) | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|--|
| (Rev. 10/02, modified) OMB No. 0651-0027 (exp. 6/30/2005) Patent and Trademark Office | | |
| To the Honorable Commissioner for Patents: Please record the attached original documents or copy thereof. | | |
| | Name and address of receiving party(ies): | |
| Yongsam Moon Deog-Kyoon Jeong Gijung Ahn | Silicon Image, Inc. 1060 E. Arques Avenue Sunnyvale, California 94086 | |
| Additional names of conveying parties attached? Yes No | | |
| 3. Nature of conveyance: ☐ Assignment ☐ Merger ☐ Security Agreement ☐ Change of Name ☐ Reassignment ☐ Other | | |
| Execution date: 4/21/03, 4/23/03, and 4/23/04, respectively. | Additional names of receiving parties attached? Yes No | |
| Application number(s) and/or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No. B. Patent No. | | |
| 10/722,842 | | |
| Additional numbers attached: ☐ Yes ☒ No | | |
| Name and address of party to whom correspondence concerning document | 6. Total No. of applications and patents involved: one (1) | |
| should be mailed: | 7. Total fee (37 CFR §3.41): <u>\$40.00</u> | |
| Customer No. | ☐ Enclosed | |
| Perkins Coie LLP P.O. Box 2168 | ⊠ Charge Deposit Account No. 50-2207 | |
| Menio Park, CA 94026 | 8. Deposit Account No. <u>50-2207</u> | |
| | (Attach duplicate copy of this page if paying by deposit account) | |
| DO NOT USE THIS SPACE | | |
| 9. Statement and signature: | | |
| To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. | | |
| Jonathan P. Kudla; Reg. No.: 47,724 Name of Person Signing | | |
| Total number of pages, Including cover sheet, attachments and document: | | |

1ey Docket: 59472-8086.US01

Α

ASSIGNMENT

THIS ASSIGNMENT, by Yongsam Moon, Deog-Kyoon Jeong, and Gijung Ahn (hereinafter referred to as the Assignors), witnesseth:

WHEREAS, the said Assignors have invented certain new and useful inventions set forth in an application for Letters Patent of the United States entitled <u>Frequency Comparator With Hysteresis</u>

<u>Between Locked And Unlocked Conditions</u>, bearing Application No. <u>10/356,695</u> and filed with the U.S. Patent and Trademark Office on January 30, 2003;

WHEREAS, SILICON IMAGE, INC., a corporation duly organized under and pursuant to the laws of California, and having its principal place of business at 1060 E. Arques Avenue, Sunnyvale, California 94086 (hereinafter referred to as the Assignee), is desirous of acquiring the entire right, title and interest in and to said inventions and said application for Letters Patent of the United States, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon;

NOW, THEREFORE, for valuable consideration, the receipt of which is hereby acknowledged, the said Assignors have sold, assigned, transfer and set over, and by these presents does sell, assign, transfer and set over, unto the said Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions, application for Letters Patent, and any and all Letters Patent or Patents in the United States of America and all foreign countries which may be granted therefor and thereon, and in and to any and all divisions, continuations, and continuations-in-part of said application, or reissues, reexaminations, or extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the said Assignee, for its own use and behoof and the use and behoof of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted, as fully and entirely as the same would have been held and enjoyed by the Assignor, had this sale and assignment not been made.

AND, for the same consideration, the said Assignors hereby covenant and agree to and with the said Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, the said Assignors are the joint and lawful owners of the entire right, title and interest in and to the said inventions and the application for Letters Patent above-mentioned, and that the same are unencumbered and that the said Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND, for the same consideration, the said Assignors hereby covenant and agree to and with the said Assignee, its successors, legal representatives and assigns, that the said Assignors will, whenever counsel of the said Assignee, or the counsel of its successors, legal representatives and assigns, shall [59472-8096/BY030290.038]

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ney Docket: 59472-8086.US01

advise that any proceeding in connection with said inventions, or said application for Letters Patent, or any proceeding in connection with Letters Patent for said inventions in any country, including interference proceedings, is lawful and desirable, or that any division, continuation, or continuation-in-part of any application for Letters patent, or any reissue or extension of any Letters Patent, to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent for said inventions, without charge to said Assignees, their successors, legal representatives and assigns, but at the cost and expense of the said Assignee, its successors, legal representatives and assigns.

AND, the said Assignors hereby request the Commissioner of Patents to issue said Letters Patent of the United States to the said Assignee as the assignee of said inventions and the Letters Patent to be issued thereon for the sole use and behoof of the said assignee, it successors, legal representatives and assigns

| Date: 04/21/2003_ | Yongsam Moon |
|------------------------|------------------|
| Date: | Deog-Kyoon Jeong |
| Date: <u>3003/4/23</u> | Gijung Ahn |

ACKNOWLEDGEMENTS

COUNTY OF Santa Clara

On April 31, 3003 before me, 1000 di M. Cana, personally appeared Yongsam Moon, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

Seal

YOLANDA M. CAMPA
Commission # 1383468
Notary Public - California \$
Santa Clara County
My Comm. Expires Nov 5, 2006

WITNESS my hand and official seal.

Yolanda M. Carnya.
Signature

Attomay Ducket: 59472-8086.US01

advise that any proceeding in connection with said inventions, or said application for Letters Paters, or any proceeding in connection with Letters Faters for sand streamins in any country, metalong interference proceedings, is lawful and desirable, or that any divisions, continuation or continuation-in-part of any application for Letters patent or any retireme or extension of my Letters Faters to be obtained thereon, is invital and destrable, sign all papers and documents, take all lawful oaths, and do all note necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Paters for said invantous, without charge in said Assigners, their successors, legal representatives and assigns, but at the cost and expense of the said Assigner, its supersects, legal representatives and assigns.

AND, the said Assignors bareby request the Crammissioner of Patents to issue said Letters Patent of the United States to the said Assigner as the assigner of said inventions and the Letters Patent to be issued thereon for the sole use and behoof of the said assigner, it successure, legal representatives and assigns

Date: 04/21/2-903

Date: 4-23-2003

Date: 3 = 3/A/23

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ACKNOWLEDGEMENTS

COUNTY OF Souta Clara

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on Light 11, 2013 before me. Lolon da fin. Carryll, personally appeared Yougann Ricon, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose many is subscribed to the within instrument and acknowledged to me that inc/she executed the same in his/her authorized especity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

Seal

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пеу Docket: 59472-8086.US01

STATE OF <u>California</u> соинту ог <u>Santa Clara</u>

1/2004 14:22 FAX 650<u>8384350</u>

On April 13,2003 before me, Yolanda M. Campa, personally appeared Deog-Kyoon Jeong, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

Seal

YOLANDA M. CAMPA Commission # 1383468 | Notary Public - California ই Santa Clara County My Ceshan, Expir**es Nov 5, 2006**

WITNESS my hand and official seal.

Signature Caracta

STATE OF California COUNTY OF Sonta Clara

April 13, 2003 before me, Volanda M. Campa personally appeared Gijung Ahn, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

Seal

YÇLANDA M. CAMPA Commission # 1383468 Notary Public - California 🕏 Santa Clara County My Comm. Expires Nov 5, 2006

WITNESS my hand and official seal.

Jolan da 14. Canga