505207341 11/27/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SHARP KABUSHIKI KAISHA (SHARP CORPORATION)	11/01/2018

RECEIVING PARTY DATA

Name:	SHARP ELECTRONICS CORPORATION	
Street Address:	reet Address: 100 PARAGON DRIVE	
City:	MONTVALE	
State/Country:	NEW JERSEY	
Postal Code: 07645		

PROPERTY NUMBERS Total: 1

Property Type	Number
Patent Number:	8989909

CORRESPONDENCE DATA

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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.

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Correspondent Name: DAVID C. RIPMA

Address Line 1: SHARP LABORATORIES OF AMERICA, INC.

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ATTORNEY DOCKET NUMBER:	SLA2970.1	
NAME OF SUBMITTER:	HATTIE E. GOLDIE	
SIGNATURE:	/Hattie E. Goldie/	
DATE SIGNED:	11/27/2018	

Total Attachments: 3

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PATENT REEL: 047596 FRAME: 0480 505207341

EXHIBIT A

Patent Assignment

This patent assignment ("Assignment") is entered into as of November 1, 2018 ("Effective Date"), by and between Sharp Corporation, a Japanese corporation, with principal place of business at 1 Takumicho, Sakai-ku, Sakai City, Osaka 590-8522, Japan ("Seller"), and Sharp Electronics Corporation with principal place of business at 100 Paragon Drive, Montvale NJ 07645, USA ("Buyer").

For good and valuable consideration, the receipt of which is hereby acknowledged, Seller hereby irrevocably assigns, sells, grants, transfers and conveys and agrees to assign, sell, grant, transfer, and convey to Buyer, and Buyer hereby accepts and receives, all right, title, and interest in and to:

- (a) the issued patents and pending patent applications identified on Schedule 1 attached hereto and any issued patent or patent application that directly or indirectly claims or is amended to claim priority to any of the above, in whole or in part (the "Listed Patents");
- (b) to the extent not included in (a), all issued patents, rights to inventions and pending and future applications for patents under U.S. law or regulation with respect to the patentable inventions from which such Listed Patents arise, including without limitation utility patents, utility models, design patents, invention certificates, provisionals, continuations, divisionals, continuations-in-part, reexaminations, reissues, extensions and renewals as well as any patents and patent applications to which any of the Listed Patents or any of the foregoing directly or indirectly claim priority, in whole or in part (subcategories (a) and (b) collectively, "Patents");
- (c) all causes of action (whether known or unknown or whether currently pending, filed or otherwise) and other enforcement rights under or on account of the Patents to be assigned hereunder (collectively, "Assigned Patents"), including without limitation all causes of action and other enforcement rights for damages, injunctive relief, and any other remedies of any kind for past, current and future infringement;
- (d) all rights to collect royalties or other payments under or on account of the Patents and the foregoing subcategory (c); and
- (e) all rights of any kind whatsoever under any of the foregoing provided by applicable law in any jurisdiction, by international treaty or otherwise (subcategories (a), (b), (c), (d) and (e), collectively, "Rights").

Seller agrees upon request (and at the expense) of Buyer to, and if Seller is unable or unwilling to do so, authorize Buyer to act in Seller's name to execute all oaths, assignments, powers, and any other papers necessary to perform Seller's obligations hereunder, testify in any proceeding, and otherwise take any action, and fully cooperate with Buyer to perform Seller's obligations hereunder, in each case, related to securing and enforcing Buyer's rights related to this Assignment,

The terms and conditions of this Assignment will inure to the benefit of Buyer, its successors, assigns, and other legal representatives and will be binding upon Seller, its successors, assigns, and other legal representatives.

IN WITNESS WHEREOF, the parties hereto have caused this Assignment to be executed as of the Effective Date. The individuals signing for the parties represent and warrant that he or she has authority to sign for and enter into this Assignment on behalf of the respective parties.

Seller:

Sharp Corporation

Name: Hirozumi Gkaku

Title: Deputy General Manager and

Division Manager of Smart Home

Development Division

Energy Management Planning

Development Unit

Buyer:

Sharp Electronics Corporation

Name: NEVIN A. Pex

Title: SUP, General Counsel 4

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SCHEDULE 1

Patents and Patent Applications

Country	Appl. No.	Pub./Issue No.	Title
US	12/817468	US8359125	ENERGY MANAGEMENT SYSTEM TO REDUCE THE LOSS OF EXCESS ENERGY GENERATION
US	12/850833	US8473107	OFFERED ACTIONS FOR ENERGY MANAGEMENT BASED ON ANOMALOUS CONDITIONS
us	13/178723	US8725303	SYSTEM AND METHOD FOR THE MULTI- DIMENSIONAL REPRESENTATION OF ENERGY CONTROL
US	13/432735	US9069361	THERMOSTAT WITH SET POINT RANGE FEEDBACK
us	13/539057	US9122285	VIRTUAL THERMOSTAT SYSTEM AND METHOD
US	14/231235	US8989909	GRAPHICAL USER INTERFACE FOR THE MULTI-DIMENSIONAL REPRESENTATION OF ENERGY CONTROL
US	13/224708	US8751054	ENERGY PREDICTION SYSTEM
US	13/371327	US9081043	SYSTEM AND METHOD FOR CALCULATING POWER USING CONTACTLESS VOLTAGE WAVEFORM SHAPE SENSOR
US	13/447040	US9153965	SYSTEM AND METHOD FOR ENERGY STORAGE MANAGEMENT
US	13/484518	US8774976	METHOD AND SYSTEM FOR REDUCING PEAK LOAD CHARGE ON UTILITY BILL USING TARGET PEAK LOAD AND COUNTERMEASURES
US	13/484633	US8761949	METHOD AND SYSTEM FOR MITIGATING IMPACT OF MALFUNCTION IN ACTUAL, LOAD DETERMINATION ON PEAK LOAD MANAGEMENT
US	13/631390	US9002531	A SYSTEM AND METHOD FOR PREDICTIVE PEAK LOAD MANAGEMENT VIA INTEGRATED LOAD MANAGEMENT
US	14/446092	US9847643	SYSTEM AND METHOD FOR MANAGING AC POWER USING AUXILIARY DC-TO-AC INVERSION

PATENT REEL: 047596 FRAME: 0483

RECORDED: 11/27/2018