

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT3825290

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SHARP KABUSHIKI KAISHA	03/22/2016

RECEIVING PARTY DATA

Name:	MERCK PATENT GMBH
Street Address:	FRANKFURTER STRASSE 250
City:	DARMSTADT
State/Country:	GERMANY
Postal Code:	64293

PROPERTY NUMBERS Total: 24

Property Type	Number
Application Number:	11434516
Application Number:	13382210
Application Number:	13382214
Application Number:	13879447
Application Number:	13879468
Application Number:	13879502
Application Number:	13984830
Application Number:	14003470
Application Number:	13877974
Application Number:	13125404
Application Number:	13131700
Application Number:	11035401
Application Number:	11035400
Application Number:	10216211
Application Number:	90011327
Application Number:	10272935
Application Number:	09716470
Application Number:	12486431
Application Number:	12961019
Application Number:	11286320

PATENT

Property Type	Number
Application Number:	11651979
Application Number:	11286343
Application Number:	12100769
Application Number:	08776503

CORRESPONDENCE DATA

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NAME OF SUBMITTER: JOHN SOPP

SIGNATURE: /John Sopp/

DATE SIGNED: 04/12/2016

Total Attachments: 5

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U.S. Patent Assignment Form

Assignment of Patent Rights

WHEREAS, Sharp Kabushiki Kaisha ("Sharp"), a business organized and existing under the laws of Japan and having its principal place of business at 22-22, Nagaike-cho, Abeno-ku, Osaka, Japan 545-8522, owns the entire right, title, and interest in and to each of the Assigned Patents (as listed in *Table 1* below), and is the owner of record of each of the Assigned Patents;

WHEREAS, Merck Patent GmbH, ("MERCK"), a business organized and existing under the laws of Germany and having its principal office at Frankfurter Straße 250, 64293 Darmstadt, Germany, is desirous of acquiring the entire right, title, and interest in and to each of the Assigned Patents;

For good and valuable consideration, the receipt of which is hereby acknowledged, Sharp ("*Assignor*"), does hereby sell, assign, transfer, and convey to MERCK ("*Assignee*"), or its designees, the entire right, title, and interest in and to any and all of the following (collectively, the "*Patent Rights*");

(a) the Assigned Patents;

(b) all reissues, reexaminations, extensions, continuations, continuations in part, continuing prosecution applications, requests for continuing examinations, divisions, registrations, or the like of any item in the foregoing category (a);

(c) inventions, invention disclosures, and discoveries described in any of the Assigned Patents and/or any item in the foregoing category (b) that (i) are included as a claim in the Assigned Patents and/or any item in the foregoing category (b), (ii) are subject matter capable of being reduced to a patent claim in a reissue or reexamination proceedings brought on any of the Assigned Patents and/or any item in the foregoing category (b), and/or (iii) could have been included as a claim in any of the Assigned Patents and/or any item in the foregoing category (b);

(d) all rights to apply in any or all countries of the world for patents,

certificates of invention, utility models, or other governmental grants or issuances of any type related to any item in any of the foregoing categories (a) through (c), including, without limitation, under the Paris Convention for the Protection of Industrial Property, the International Patent Cooperation Treaty, or any other convention, treaty, agreement, or understanding;

(e) all causes of action (whether known or unknown or whether currently pending, filed, or otherwise) and other enforcement rights under, or on account of, any of the Assigned Patents and/or any item in any of the foregoing categories (b) through (d), including, without limitation, all causes of action and other enforcement rights for

(1) damages,

(2) injunctive relief; and

(3) any other remedies of any kind for past, current, and future infringement; and

(f) all rights to collect royalties and other payments under or on account of any of the Assigned Patents and/or any item in any of the foregoing categories (b) through (e).

Table 1

Application No.	Publication No.	Registration No.
11/063047	2006-0055858	7843531
12/915675	2011-0043729	8243241
13/533817	2012-0261846	8525956
13/533860	2012-0262657	8514358
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13/382214	2012-0099064	8411238
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13/879502	2013-0196565	
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14/003470	2014-0002782	
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14/003976	2013-0342791	9151987
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10/804303	2004-0191428	7279203
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13/131700	2011-0222005	8679595
11/035401	2005-0185131	7327433
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10/272935	2003-0042472	6720029
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12/486431	2009-0316098	8054435
12/961019	2012-0141694	8178173
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11/651979	2007-0170395	7553523
11/286343	2006-0115606	7351453
12/100769	2008-0251762	7582338
08/776503		5753142

Assignor represents, warrants, and covenants that:

(1) Assignor owns the entire right, title, and interest in and to each of the Assigned Patents, and all reissues, reexaminations, extensions, continuations, continuations in part, continuing prosecution applications, requests for continuing examinations, divisions, registrations, or the like of any of the Assigned Patents. Assignor has the full power and authority, and has obtained all third party consents, approvals and/or other authorizations required to enter into this Assignment of Patent Rights and to carry out its obligations hereunder, including the assignment of the Assigned Patents; and

(2) Assignor has obtained and properly recorded previously executed assignments for the Assigned Patents as necessary to fully perfect its entire right, title, and interest therein in accordance with governing law and regulations in each respective jurisdiction, including all assignments from all inventors of the Assigned Patents. The Assigned Patents are free and clear of all liens, claims, mortgages, security interests or other encumbrances, and restrictions. There are no actions, suits, investigations, claims or proceedings threatened, pending or in progress relating in any way to the Assigned Patents.

Assignor hereby authorizes the respective patent office or governmental agency in each jurisdiction to issue any and all patents, certificates of invention, utility models or other governmental grants or issuances that may be granted upon any of the Assigned Patents in the name of Assignee, as the assignee to the entire interest therein.

Assignor will, at the reasonable request of Assignee and without demanding any further consideration therefore, do all things necessary, proper, or advisable, including without limitation, the execution, acknowledgment, and recordation of specific assignments, oaths, declarations, and other documents on a country-by country basis, to assist Assignee in obtaining and perfecting the Patent Rights. The terms and conditions of this Assignment of Patent Rights will inure to the benefit of Assignee, its successors, assigns, and other legal representatives and will be binding upon Assignor, its successors, assigns, and other legal representatives.

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IN WITNESS WHEREOF, this Assignment of Patent Rights is executed at
Osaka Japan on March 22, 2016

ASSIGNOR:

Sharp Kabushiki Kaisha

By: Kiyoshi Yonetsu

Name: Kiyoshi Yonetsu

Title: Vice President
Head of Intellectual Property Unit
Corporate R&D Division

(Signature MUST be witnessed)

Witnessed by:

N. Tachibana

Date: March 22, 2016