

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Akihiro AZUMA</td> <td>03/15/2012</td> </tr> <tr> <td>Masaki TAKEUCHI</td> <td>03/15/2012</td> </tr> </tbody> </table>		Name	Execution Date	Akihiro AZUMA	03/15/2012	Masaki TAKEUCHI	03/15/2012				
Name	Execution Date										
Akihiro AZUMA	03/15/2012										
Masaki TAKEUCHI	03/15/2012										
RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>SHARP KABUSHIKI KAISHA</td> </tr> <tr> <td>Street Address:</td> <td>22-22, Nagaïke-cho, Abeno-ku</td> </tr> <tr> <td>City:</td> <td>Osaka-shi, Osaka</td> </tr> <tr> <td>State/Country:</td> <td>JAPAN</td> </tr> <tr> <td>Postal Code:</td> <td>545-8522</td> </tr> </table>		Name:	SHARP KABUSHIKI KAISHA	Street Address:	22-22, Nagaïke-cho, Abeno-ku	City:	Osaka-shi, Osaka	State/Country:	JAPAN	Postal Code:	545-8522
Name:	SHARP KABUSHIKI KAISHA										
Street Address:	22-22, Nagaïke-cho, Abeno-ku										
City:	Osaka-shi, Osaka										
State/Country:	JAPAN										
Postal Code:	545-8522										
PROPERTY NUMBERS Total: 1											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13502468</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13502468						
Property Type	Number										
Application Number:	13502468										
CORRESPONDENCE DATA											
Fax Number: (703)205-8050 Phone: 703-205-8000 Email: mailroom@bskb.com, tchau@bskb.com <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i> Correspondent Name: BIRCH, STEWART, KOLASCH & BIRCH, LLP Address Line 1: P.O. Box 747 Address Line 4: Falls Church, VIRGINIA 22040-0747											
ATTORNEY DOCKET NUMBER:	0033-1409PUS1										
NAME OF SUBMITTER:	MICHAEL R. CAMMARATA										
Total Attachments: 2 source=2012-03-30 Assignment 0033-1409PUS1#page1.tif source=2012-03-30 Assignment 0033-1409PUS1#page2.tif											

OP \$40.00 13502468

BIRCH, STEWART, KOLASCH & BIRCH, LLPUNITED STATES PATENT RIGHTS, OR
UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS**ASSIGNMENT**Application No. 13/502,468Filed April 18, 2012**Insert Name(s)
of Inventor(s)*******(Given Name FAMILY NAME (ALL CAPS))*****WHEREAS, Akihiro AZUMA Masaki TAKEUCHI**Insert Title
of Invention**

(hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in

Network System, Communication Method, Communication Device, and Computer-readable Recording
Medium Having Communication Program Recorded Thereonfor which an application for Letters Patent of the United States of America has been executed by the undersigned
(except in the case of a provisional application).**Insert Date
of Signing of
Application**on March 15, 2012; and**Insert Name
of Assignee**WHEREAS, Sharp Kabushiki Kaisha**Insert Address
of Assignee**of 22-22, Nagaike-cho, Abeno-ku, Osaka-shi, Osaka 545-8522 Japan**CHECK BOX
IF APPROPRIATE**its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring
the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted
therefor in the United States of America and
☒ in any foreign countries.NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) to the undersigned in hand paid, the receipt
of which is hereby acknowledged, and other good and valuable consideration, the undersigned has (have) sold,
assigned and transferred, and by these presents does sell, assign and transfer unto said Assignee the full and exclusive
right to the said invention in the United States of America, its territories, dependencies and possessions and the entire
right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of
America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign
countries;and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full term or terms for
which the same may be granted.

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree (s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letter Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States of America patent(s) or a grant of a valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorize(s) and request(s) the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patents resulting from said application or any continuing, divisional conversion or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the law firm of Birch, Stewart, Kolasch & Birch, LLP the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

The undersigned hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date March 15, 2012, Name of Inventor Akihiro AZUMA
(signature) Akihiro AZUMA

Date March 15, 2012, Name of Inventor Masaki TAKEUCHI
(signature) Masaki TAKEUCHI

Date _____, Name of Inventor _____
(signature)

Date _____, Name of Inventor _____
(signature)

Date _____, Name of Inventor _____
(signature)

Date _____, Name of Inventor _____
(signature)