

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>Bradley Rhodes</td><td>03/31/2008</td></tr><tr><td>John W. Barrus</td><td>03/31/2008</td></tr><tr><td>Guotong Feng</td><td>03/31/2008</td></tr></tbody></table>		Name	Execution Date	Bradley Rhodes	03/31/2008	John W. Barrus	03/31/2008	Guotong Feng	03/31/2008				
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RECEIVING PARTY DATA													
<table border="1"><tr><td>Name:</td><td>Ricoh Co., Ltd.</td></tr><tr><td>Street Address:</td><td>15-5 Minami Aoyama 1-Chome</td></tr><tr><td>Internal Address:</td><td>Minato-ku</td></tr><tr><td>City:</td><td>Tokyo</td></tr><tr><td>State/Country:</td><td>JAPAN</td></tr><tr><td>Postal Code:</td><td>107-8544</td></tr></table>		Name:	Ricoh Co., Ltd.	Street Address:	15-5 Minami Aoyama 1-Chome	Internal Address:	Minato-ku	City:	Tokyo	State/Country:	JAPAN	Postal Code:	107-8544
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PROPERTY NUMBERS Total: 1													
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CORRESPONDENCE DATA													
Fax Number: (650)938-5200 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>													
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ATTORNEY DOCKET NUMBER:	20412-13355												
NAME OF SUBMITTER:	Kanda Ishihara												
Total Attachments: 4													

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PATENT
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ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, the person(s) named below (referred to as "INVENTOR" whether singular or plural) has sold, assigned, and transferred and does hereby sell, assign, and transfer to **Ricoh Co., Ltd.**, a corporation of **Japan** having a place of business at **15-5 Minami Aoyama 1-Chome, Minato-Ku, Tokyo, Japan 107-8544**, ("ASSIGNEE"), for itself and its successors, transferees, and assignees, the following:

1. The entire worldwide right, title, and interest in all inventions and improvements ("SUBJECT MATTER") that are disclosed in the provisional application filed under 35 U.S.C. §111(b) or non-provisional application filed under 35 U.S.C. §111(a) and entitled **INDEPENDENT PIXEL WAVEFORMS FOR UPDATING ELECTRONIC PAPER DISPLAYS** ("APPLICATION"), which:

- ☐ is to be filed herewith.
- ☒ having a filing date of March 31, 2008, and bearing U.S. application serial number 12/059,399.
- ☒ The APPLICATION claims priority from a provisional, filed on **June 15, 2007**, now bearing US application serial number **60/944,415**.

2. The entire worldwide right, title, and interest in and to:
(a) the APPLICATION; (b) all applications claiming priority from the APPLICATION; (c) all provisional, utility, divisional, continuation, substitute, renewal, reissue, and other applications related thereto which have been or may be filed in the United States or elsewhere in the world; (d) all patents (including reissues and re-examinations) which may be granted on the applications set forth in (a), (b), and (c) above; and (e) all right of priority in the APPLICATION and in any underlying provisional or foreign application, together with all rights to recover damages for infringement of provisional rights.

INVENTOR agrees that ASSIGNEE may apply for and receive patents for SUBJECT MATTER in ASSIGNEE's own name.

INVENTOR agrees to do the following, when requested, and without further consideration, in order to carry out the intent of this Assignment: (1) execute all oaths, assignments, powers of attorney, applications, and other papers necessary or desirable to fully secure to ASSIGNEE the rights, titles and interests herein conveyed; (2) communicate to ASSIGNEE all known facts relating to the SUBJECT MATTER; and (3) generally do all lawful acts that ASSIGNEE shall consider desirable for securing, maintaining, and enforcing worldwide patent protection relating to the SUBJECT MATTER and for vesting in ASSIGNEE the rights, titles, and interests herein conveyed. INVENTOR further agrees to provide any successor, assign, or legal representative of ASSIGNEE with the benefits and assistance provided to ASSIGNEE hereunder.

INVENTOR represents that INVENTOR has the rights, titles, and interests to convey as set forth herein, and covenants with ASSIGNEE that the INVENTOR has not made and will not

Title: INDEPENDENT PIXEL WAVEFORMS FOR UPDATING ELECTRONIC PAPER
DISPLAYS
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hereafter make any assignment, grant, mortgage, license, or other agreement affecting the rights, titles, and interests herein conveyed.

INVENTOR grants the attorney of record the power to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original and all of which may be taken together as one and the same Assignment.

Name and Signature

Bradley Rhodes
Bradley Rhodes

Date of Signature

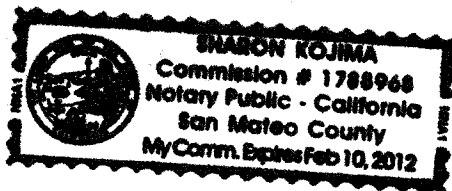
3/31/2008

State of CALIFORNIA }
County of SAN MATEO } ss.

On MARCH 31, 2008 before me, SHARON KOJIMA, Notary Public, personally appeared Bradley Rhodes, 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 executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.


Sharon Kojima
Notary

Notary Seal



Title: INDEPENDENT PIXEL WAVEFORMS FOR UPDATING ELECTRONIC PAPER
DISPLAYS
Filed: March 31, 2008
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Name and Signature


John W. Barrus

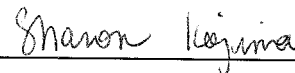
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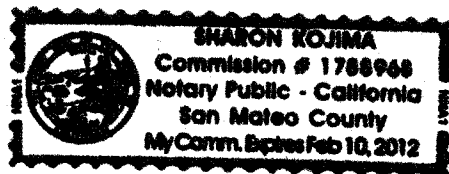
Mar 31, 2008

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County of SAN MATEO } ss.

On MARCH 31, 2008 before me, SHARON KOJIMA, Notary Public,
personally appeared John W. Barrus, 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 executed the same in his authorized capacity, and that by his signature on
the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

Notary Seal


Notary



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Name and Signature

Guotong Feng
Guotong Feng

Date of Signature

3/31/2008

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County of SAN MATEO } ss.

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