

PATENT ASSIGNMENT

Electronic Version v1.1

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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr> <td>Yasuo IMURA</td> <td>04/28/2010</td> </tr> <tr> <td>Hiroyuki HIRAKAWA</td> <td>04/28/2010</td> </tr> <tr> <td>Ayae NAGAOKA</td> <td>04/28/2010</td> </tr> <tr> <td>Tadashi IWAMATSU</td> <td>04/28/2010</td> </tr> </tbody> </table>		Name	Execution Date	Yasuo IMURA	04/28/2010	Hiroyuki HIRAKAWA	04/28/2010	Ayae NAGAOKA	04/28/2010	Tadashi IWAMATSU	04/28/2010
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CORRESPONDENCE DATA											
<p>Fax Number: (703)816-4100</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 703-816-4000</p> <p>Email: teh@nixonvan.com</p> <p>Correspondent Name: NIXON & VANDERHYE, PC</p> <p>Address Line 1: 901 NORTH GLEBE ROAD, 11TH FLOOR</p> <p>Address Line 4: ARLINGTON, VIRGINIA 22203</p>											
ATTORNEY DOCKET NUMBER:	1035-979										
NAME OF SUBMITTER:	H. Warren Burnam, Jr.										
<p>Total Attachments: 2</p> <p>source=Assignment#page 1.tif</p>											

OP \$40.00 12781997

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PATENT
REEL: 024400 FRAME: 0490

ASSIGNMENT OF PATENT APPLICATION

(Inventors) Yasuo IMURA
Hiroyuki HIRAKAWA
Ayae NAGAOKA
Tadashi IWAMATSU

(Assignee) In consideration of the sum of one dollar (\$1.00) and other good and valuable
(Address) considerations paid to each of the undersigned, the undersigned agree(s) to assign, and
hereby does assign, transfer and set over to
SHARP KABUSHIKI KAISHA
(hereinafter designated as the Assignee) the undersigned's entire right, title and interest
for the United States, its territories, dependencies and possessions, and for the country of
(Other in the invention, and all application(s) for patent and any Letters Patent which may
Countries) be granted therefor, known as
(Title) ELECTRON EMITTING ELEMENT, ELECTRON EMITTING DEVICE, CHARGING
DEVICE, IMAGE FORMING APPARATUS, ELECTRON-BEAM CURING DEVICE, LIGHT
EMITTING DEVICE, IMAGE DISPLAY DEVICE, AIR BLOWING DEVICE, AND COOLING
DEVICE (Case No. -)
for which the undersigned has (have) executed on even date herewith an application for
patent in the United States of America or, if not on even date, then has executed
on or has already filed in
U.S. appln. Serial No. filed on
The undersigned acknowledges an obligation of assignment of this invention to said
assignee at the time the invention was made.

The undersigned agree(s) to execute all papers and documents necessary in connection with the
application or any interference which may be declared and any continuing or divisional applications
thereof and also to execute separate assignments in connection with such applications as the Assignee
may deem necessary or expedient and further to perform any act which may be necessary in connection
with claims or provisions of the International Convention for 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 patent to the Assignee.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any
and all Letters Patent of the United States resulting from said application or any division or divisions or
continuing applications thereof to the said Assignee, as Assignee of the entire interest, and hereby
covenants that he has (they have) 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 firm of NIXON & VANDERHYE P.C. 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 United States Patent Office for recordation of this document. It is understood and agreed that
ASSIGNEE'S attorneys Nixon & Vanderhye P.C. have represented only ASSIGNEE and will continue to
represent only ASSIGNEE with respect to this invention.

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

Date April 28, 2010 Signature of inventor

Yasuo Imura

Yasuo IMURA

Date April 28, 2010 Signature of inventor

Hiroyuki HIRAKAWA

Hiroyuki HIRAKAWA

Date April 28, 2010 Signature of inventor

Ayae Nagaoka

Ayae NAGAOKA

Date April 28, 2010 Signature of inventor

Tadashi Iwamatsu

Tadashi IWAMATSU

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