

PATENT ASSIGNMENT

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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>Ayae NAGAOKA</td><td>03/11/2011</td></tr><tr><td>Hiroyuki HIRAKAWA</td><td>03/11/2011</td></tr><tr><td>Yasuo IMURA</td><td>03/11/2011</td></tr><tr><td>Kanako HIRATA</td><td>03/11/2011</td></tr><tr><td>Tadashi IWAMATSU</td><td>03/11/2011</td></tr></tbody></table>	Name	Execution Date	Ayae NAGAOKA	03/11/2011	Hiroyuki HIRAKAWA	03/11/2011	Yasuo IMURA	03/11/2011	Kanako HIRATA	03/11/2011	Tadashi IWAMATSU	03/11/2011	
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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>13074533</td></tr></tbody></table>	Property Type	Number	Application Number:	13074533									
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Application Number:	13074533												
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Total Attachments: 1 source=Assignment#page1.tif													

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PATENT
REEL: 026042 FRAME: 0390

Case No. : _____

ASSIGNMENT OF U.S. PATENT APPLICATION

Ayae NAGAOKA, Hiroyuki HIRAKAWA, Yasuo IMURA, Kanako HIRATA
and Tadashi IWAMATSU

(Inventors)

(Assignee)

(Address)

In consideration of the sum of one dollar (\$1.00) and other good and valuable 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 a corporation of 22-22, Nagaïke-cho,

Abeno-ku, Osaka-shi, Osaka, 545-8522 Japan

(hereinafter designated as the Assignee) the undersigned's entire right, title and interest for the United States, its territories, dependencies and possessions in the invention, and all applications for patent and any Letters Patent which may be granted therefore, known as

(Title)

ELECTRON EMITTING ELEMENT AND METHOD FOR PRODUCING THE SAME

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 U.S. application Serial No. _____, 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 March 11, 2011 Signature of inventor

Ayae Nagaoka

Ayae NAGAOKA

Date March 17, 2011 Signature of inventor

Hiroyuki HIRAKAWA

Hiroyuki HIRAKAWA

Date March 11, 2011 Signature of inventor

Yasuo Imura

Yasuo IMURA

Date March 11, 2011 Signature of inventor

Kanako Hirata

Kanako HIRATA

Date March 11, 2011 Signature of inventor

Tadashi Iwamatsu

Tadashi IWAMATSU

264637