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U.S. Department of Commerce Patent and Trademark Office

Our Ref.: 914-152

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Hiroyuki YODA Noriaki SHIBUYA  6.5.0  Additional name/s of conveying party/ies attached? □  3. Nature of conveyance: □ Merger □ Security Assignment □ Change of Name □ Change of Name □ Change of Name □ Change of Name □ Additional name/s & address/es attached? □ You □ Yo	:s ⊠ No
Noriaki SHIBUYA  6.50  Additional name/s of conveying party/ies attached? □  3. Nature of conveyance: □ Merger □ Security Assignment □ Change of Name □ Change of Name □ Change of Name □ Change of Name □ Additional name/s & address/es attached? □ Yes  4. Application number(s) or patent number(s): □ If this document is being filed together with a new application, the execution date of the application is:  A. Patent Application No(s). □ B. Patent No(s). □ (2) □ (2) □ (3) □ Additional numbers attached □ Yes ☑ No  5. Name and address of party to whom correspondence concerning document should be mailed: □ City: Osaka-shi State/Country: Osaka/Japan Zip: □ Additional name/s & address/es attached? □ Yes □ No	es ⊠ No
Additional name/s of conveying party/ies attached?   3. Nature of conveyance:  Assignment Merger State/Country: Osaka/Japan Zip:  Other  Execution Date: May 17, 2002 Additional name/s & address/es attached? Yes  4. Application number(s) or patent number(s):  If this document is being filed together with a new application, the execution date of the application is:  A. Patent Application No(s).  (1) 10/126,966 (1) (2) (3)  Additional numbers attached Yes No  5. Name and address of party to whom correspondence concerning document should be mailed:	:s ⊠ No
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(3)  Additional numbers attached Yes No  5. Name and address of party to whom correspondence concerning document should be mailed:  (3)  Additional numbers attached Yes No  6. Total number of applications & patents involved:	
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Internal Address:  8. The Commissioner is hereby authorized to charge	e anv
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of the original document.	
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Mark E. Nusbaum  June 5, 2002	
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## **ASSIGNMENT**

		Application No.	Filed April 22, 2002
Insert Name(s)	<b>→</b>	WHEREAS, Akimasa UMEMOTO,	-
of Inventor(s)		Hiroyuki YODA and Noriaki SHIBUYA	
Insert Title		(hereinafter designated as the undersigned) has (have) invented certain new and useful	improvements in
of Invention	<b>→</b>	PHOTOVOLTAIC MODULE HAVING LIGHT RECEPTIVE, GLASS LAMINA	ATE STRUCTURE AND
		PHOTOVOLTAIC MODULE HAVING LIGHT RECEPTIVE, MULTI-LAYER	STRUCTURE
Insert Date of Signing of Application	<b>→</b>	onMay 17, 2002	; and
Insert Name of Assignee	-	WHEREAS, Sharp Kabushiki Kaisha	
Insert Address of Assignee	<b>⇒</b>	of22-22, Nagaike-cho, Abeno-ku, Osaka-shi, Osaka, Japa	an
CHECK BOX if appropriate	<b>-</b>	its heirs, successors, legal representatives and assigns (hereinafter designated as the acquiring the entire right, title and interest in and to said invention and in and to a may be granted therefor in the United States of America and in any and all foreign countries.	
		NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) to paid, the receipt of which is hereby acknowledged, and other good and valuable consideration (have) sold, assigned and transferred, and by these presents does sell, assigned the full and exclusive right to the said invention in the United States of dependencies and possessions and the entire right, title and interest in and to any	leration, the undersigned a and transfer unto said America, its territories,

which may be granted therefor in the United States of America, its territories, dependencies and possessions,

and to any and all divisions, reissues, continuations and extensions thereof for the full term or terms for

and if the box above is designated, in any and all foreign countries;

which the same may be granted.

PATENT REEL: 012963 FRAME: 0816 The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional 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 or reissue thereof or Letters 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) the 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 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 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 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 May 17, 2002,	Name of Inventor	Akimasa	Umemoto
Date May 17, 2002			
bale	Name of inventor	7100000	Hiroyuki YODA
Date <u>May 17, 2002</u> ,	Name of Inventor	Novaki	Noriaki SHIBUYA
Date	Name of Inventor		The second secon
Date,	Name of Inventor		
Date	Name of Inventor		
Date,	Name of Inventor		
Date	Name of Inventor		
Date	Name of Inventor		

RECORDED: 06/05/2002

PATENT REEL: 012963 FRAME: 0817