Form PTO-1595 1-31-92



05-14-2002 PATEN 102089283

J.S. Department of Commerce Patent and Trademark Office

Our Ref.: 1767-88

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John Libbighinetti, vv ushington, D.C. 20231	
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5,9,02	Name: Pioneer Corporation
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() () ()	Street Address: No. 4-1 Meguro 1-chome, Meguro-ku
	Street Address. No. 4-1 Megaro 1-chome, Megaro-ku
Additional name/s of conveying party/ies attached?	
3. Nature of conveyance:	City: Tokyo-to
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Execution Date: December 5, 2001	Additional name/s & address/es attached? X Yes No
4. Application number(s) or patent number(s):	
If this document is being filed together with a new application, the execution	n date of the application is: N/A

A. Patent Application No(s).	B. Patent No(s).
(1) 10/013,716	(1)
1.1	(1) (2)
(2)	
(3)	(3)
Additional numbers att	
5. Name and address of party to whom correspondence	6. Total number of applications & patents involved:1
concerning document should be mailed:	
-	7. Total fee (37 C.F.R. 3.41) \$ 0.00
Name: Arthur R. Crawford	⊠ Enclosed
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Company Nines O. Wandonkua D.C.	deficiency, or credit any overpayment, in the fee(s) filed, or
Street Address: Nixon & Vanderhye P.C.	
1100 North Glebe Road	asserted to be filed, or which should have been filed herewith
8 th Floor	(or with any paper thereafter filed in this application by this
City: Arlington State: VA Zip: 22201	firm) to our Account No. 14-1140.
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To the best of my knowledge and belief, the foregoing informa	ion is true and correct and any attached conv is a true conv
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	M 0 2002
Arthur R. Crawford	May 9, 2002
Name of Person Signing Sign	nature Date
Reg. No. 25,327	
Total number of pages including origin	nal cover sheet, attachments, and document: [3]
A P.C.len	

PATENT REEL: 012878 FRAME: 0504

626049

Commissioner of Patents and Trademarks

Our Ref: 1767-88

RECORDATION FORM COVER SHEET

PATENTS ONLY

Box Assignment, Washington, D.C. 20231	
1. Name of conveying party(ies):	
2. Name: Pioneer FA Corporation Street Address: No. 6-1-1 Fujimi, Tsurugashima-shi City: Saitama-ken State: Japan Zip:	
 4. Application number(s) or patent number(s): A. Patent Application No(s). (4) (5) (6) (7) (8) (9) 	B. Patent No(s). (4) (5) (6) (7) (8) (9)

PATENT 626049 REEL: 012878 FRAME: 0505 1-31-92

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1. Name of conveying party(ies):	2. Name and address of receiving party(ies):
Shinichi SUZUKI	2. Traine and address of receiving party(les).
	Name: Pioneer FA Corporation
	Internal Address:
	Street Address: 6-1-1 Fujimi, Tsurugashima-shi
Additional name/s of conveying party/ies attached?	
3. Nature of conveyance:	City Cathernal
Assignment Merger	City: Saitama-ken
Security Assignment Change of Name	State/Country: <u>Japan</u> Zip:
Other	Zip:
Execution Date: December 5, 2001	Additional name/s & address/es attached? X Yes No
	radicional namers de address/es attached: 27 1es 170
4. Application number(s) or patent number(s):	
If this document is being filed together with a new application, the execut	tion date of the application is: December 13, 2001
A. Patent Application No(s).	B. Patent No(s).
(1) 10/013,716	(1)
(2)	(2)
(3)	(3)
Additional numbers a	
5. Name and address of party to whom correspondence	6. Total number of applications & patents involved:1
concerning document should be mailed:	7.77 - 16 (27.077) 2.44)
Norman And D.C. C. 1	7. Total fee (37 CFR 3.41) \$ 40.00
Name: Arthur R. Crawford	⊠ Enclosed
Internal Address:	Authorized to be charged to deposit account #14-1140
memai Address.	8. The Commissioner is hereby authorized to charge any
Street Address: Nixon & Vanderhye P.C.	deficiency in the fee(s) filed, or asserted to be filed, or which
1100 North Glebe Road	should have been filed herewith (or with any paper thereafter
8 th Floor	filed in this application by this firm) to our Account No.
City: Arlington State: VA Zip: 22201	14-1140.
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To the best of my knowledge and belief, the foregoing inform	ation is true and correct and any attached copy is a true copy
of the original document.	
Anthony D. Chronifond	F.1. 20.2002
Arthur R. Crawford	February 20,2002
Name of Person Signing Si Reg. No. 25,327	gnature Date
	ginal cover sheet, attachments, and document: [2]
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CAAC CHOCKETY AAAAACA ***** /	

PATENT

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REEL: 012878 FRAME: 0506

101-5701

ASSIGNMENT OF PATENT APPLICATION

	(1) Shinichi SUZUKI
	(2)
(Inventors)	(3) and
	(4)
	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
(Assignee)	(5) PIONEER CORPORATION
(Address)	(6) of No. 4-1 Meguro 1-chome, Meguro-ku, Tokyo-to, Japan
	(hereinafter designated as the Assignee) the entire right, title and interest for the United States, its territories, dependencies and possessions, and for the country of
(Assignee)	(7) PIONEER FA CORPORATION
(Address)	(8) of No. 6-1-1 Fujimi, Tsurugashima-shi, Saitama-ken, Japan
(Address)	(hereinafter designated as the Assignee) the entire right, title and interest for the United States, its territories, dependencies and possessions, and for the country of
(Other Countries)	(9) in the invention, and all applications for patent and any Letters Patent which may be granted therefor, known as
(Title)	(10) METHOD FOR PRODUCING MICRO BUMP (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
	(11) on or has already filed in
	(12) U.S. appln. Serial Number, filed on
	(13) The undersigned acknowledges an obligation of assignment of this invention to said assignee at the time the invention was made.
interference win connection necessary in connection	undersigned agree(s) to execute all papers and documents necessary in connection with the application or any which may be declared and any continuing or divisional applications thereof and also to execute separate assignments with such applications as the Assignee may deem necessary or expedient and further to perform any act which may be connection with claims or provisions of the International Convention for Protection of Industrial Property or similar
2) The u	indersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States
patent to the	indersigned 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 t	he entire interest, and hereby convenants that he has (they have) full right to convey the entire interest herein that he has (they have) not executed and will not execute, any agreement in conflict herewith.
4) Then	redesigned hereby grant(s) the firm of NIXON & VANDERHYE P.C. the power to insert on this assignment any
further identif	fication which may be necessary to desirable in order to comply with the rules of the United States Patent Office for
	this document.
In witnes	ss whereof, executed by the undersigned on the date(s) opposite the undersigned signature(s).
Date December	er 5, 2001 Signature of Inventor (1) S, Slighth
Date	Signature of Inventor (1)
Date	Signature of Inventor (3)
Date	Signature of Inventor (4)

RECORDED: 05/09/2002

PATENT REEL: 012878 FRAME: 0507