

Our Docket No.: 789_135

Form	PTO 1595 102853	HEET U.S. Department of Commerce				
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To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents on hand thereof.						
1.	Name of conveying party(ies)	2. Name and address of receiving party(ies):				
Yukihisa TAKEUCHI, Tsutomu NANATAKI and Iwao OHWADA Additional name(s) of conveying parties attached ✓ No		Name: NGK Insulators, Ltd. Address: 2-56, Suda-Cho, Mizuho-Ku Nagoya-City, Aichi-Prefecture 467-8530				
3.	Nature of Conveyance: Assignment Merger Security Agreement Change of Name Other	Additional name(s) attached? V No				
	Execution Date July 15, 2004	1553				
4.	4. Application number(s) or patent number(s) If this document is being filed together with a NEW APPLICATION , the execution date of this application is July 15, 2004.					
	A. Patent Application No.(s)	B. Patent No.(s)				
	ì	2. 1				
2004 DTESSEM1 00000078 10952524						
5.	Name and address of party to whom correspondence concerning this document should be mailed:	6. Total number of application and patents involved: 1				
	Name: Stephen P. Burr					
	Address: BURR & BROWN P.O. Box 7068 Syracuse, NY 13261-7068 Telephone: (315) 233-8300 Facsimile: (315) 233-8320	7. Total fee (37 CFR 3.41) \$40.00 Enclosed Authorized to charge any deficiency or credit any over payment to Deposit Account No. 50-1446.				
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8.	8. Statement and Signature: To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Stephen P, Burr Reg. No. 32,970 Statement and Signature: September 28, 2004 Date					
Total Number of Pages Comprising Cover Sheet 4						
Mai	Mail documents to be recorded with required cover sheet information to: Mail Stop Assignment Recordation Services Director of the U.S. Patent and Trademark P.O. Box 1450 Alexandria, VA 22313-1450					

PATENT

REEL: 015844 FRAME: 0343

ASSIGNMENT

Yukihisa TAKEUCHI					
(Inventor 1)					
Tsutomu NANATAKI					
(Inventor 2)					
Iwao OHWADA					
(Inventor 3)					
(Inventor 4)					
(Inventor 5)					
(Inventor 6)					
(Inventor 7)					
(Inventor 8)					
各々の署名人に対して支払われた総額1ドル In consideration of the sum of dollar (\$1.00)					
(\$1.00) および他の適切な有価約因を考慮し	and other good and valuable consideration paid				
て、本署名人(ら)は、	to each of the undersigned, the undersigned agree(s) to assign, and hereby does assign,				
{	transfer and set over to				
NGK INSUL	ATORS, LTD.				
Name of Assignee					
2-56, Suda-cho, Mizuho-ku, Nagoya-city, Aichi-pref. Address of Assignee					
467-8530, JAPAN					
(以降譲受人と称する)に対して、以下に示	(hereinafter designated as the Assignee) the				
される発明、本発明に関する全ての特許出願 及び全ての特許権に関する合衆国、その領	entire right, title and interest for the United States, its territories, dependencies and				
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し、その結果、譲渡および移転し、	which may be granted therefor, known as				
ELECTRON EMITTER AND METHOD OF PRODUCING THE SAME					
(Identification of Invention, such as Title, Case Number or Foreign Application Number)					

Page 1 of 3

前記発明は、本前記署名人が下記の日付・出 for which the undersigned have execute				
願番号でアメリカ合衆国において特許出願を application for patent in the United State 履行したものである。	s oi			
Third and a second a second and				
on July 15, 2004				
(Insert Date of Signing of Application)				
U.S. Application(s) Serial Number(s) filed				
(Alternative identification)				
1) 本署名人 (ら) は本出願、その継続出願お 1) The undersigned agree(s)	to			
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履行することに同意し、譲受人が必要と思わ the application and any continuing or divis	sional			
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2) 本署名人 (ら) は、本出願もしくはその継 2) The undersigned agree(s)				
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全ての書類を履行することに同意し、証拠取 concerning this application or continuation	ı or			
得およびそのようなインターフェアレンスの division thereof and to cooperate with the				
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interference. 3) 本署名人(ら)は、すべての用紙および書 3) The undersigned agree(s)				
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Convention for Protection of Industrial Pro or similar agreements.	perty			
4) 本署名人(ら)は、前記譲受人に対し 4) The undersigned agree(s) t				
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必要なすべての積極的な行為を履行すること necessary to obtain a grant of a valid Unite	d			
に同意する。 States patent to the Assignee.	u			
5) 本署名人(ら)は、本出願もしくはその 5) The undersigned hereby 分割出願もしくはその継続出願から発生した authorize(s) and request(s) the Commission	.o£			
すべての米国特許を、全ての利益の譲受人と Patents to issue any and all Letters Patents	ef the			
して前記譲受人に対して発行することを特許 United States resulting from said application	or the			

conflict herewith.

庁長官に許可および請求し、署名人(ら)は ここに譲渡される全ての利益を譲渡するため

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を過去に履行することもなく、もしくは将来

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any 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

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- 6) 本署名人(ら)は、この書類の記録 上、米国特許商標庁の規定に従うために 必要もしくは所望の追加確認事項をこの 譲渡証に記入するための権利が、バー& ブラウン弁護士事務所(Burr & Brown)に 付与されていることをここに承認する。
- 6) The undersigned hereby grant(s) the firm of BURR & BROWN 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 and Trademark Office recordation of this document.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).						
	Signature	Guk:hisa Takeuchi (SEAL) Yukinisa TAKEUCHI				
		Tsutomy Nanataki (SEAL)				
Date July 15, 2004	Signature	Tsutomu NANATAKI Jwao Ohwada (SEAL) Tuao OHWADA				
Date	Signature	(SEAL)				
Date	Signature	(SEAL)				
Date	Signature	(SEAL)				
Date	Signature	(SEAL)				
Date	Signature	(SEAL)				
Date Date Date	Signature Signature Signature Signature	Iwao DHWADA				