Our Docket No.: 791_229

NL-102576010 SHEET Form PTO 1595 U.S. Department of Commerce U.S. Patent and Trademark Office PATENTS ONL x To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents on hand thereof. Name and address of receiving party(ies): Name of conveying party(ies) Yukihisa TAKEUCHI, Koji KIMURA and Tatsuo KAWAGUCHI Name: NGK Insulators, Ltd. Address: 2-56, Suda-Cho, Mizuho-Ku Additional name(s) of conveying parties attached No Nagoya-City, Aichi-Prefecture 467-8530 Nature of Conveyance: Assignment Merger Additional name(s) attached? VNo Change of Name Security Agreement Other Execution Date September 29, 2003 Application number(s) or patent number(s) 10618849 If this document is being filed together with a NEW APPLICATION, the execution date of this application is September 29, 2003. A. Patent Application No.(s) B. Patent No.(s) Additional Numbers attached? ___ Yes _ No Name and address of party to whom correspondence Total number of application and patents involved: 1 concerning this document should be mailed: Stephen P. Burr Name: Address: BURR & BROWN Total fee (37 CFR 3.41) \$40.00 P.O. Box 7068 Syracuse, NY 13261-7068 Enclosed Telephone: (315) 233-8300 Authorized to charge any deficiency or credit any over Facsimile: (315) 233-8320 payment to Deposit Account No. 50-1446. DO NOT USE THIS SPACE 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. October 3, 2003 Total Number of Pages Comprising Cover Sheet 4 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

ASSIGNMENT

	Yukihisa '				
	(Inve	ntor 1)			
	Koji K	IMURA			
	(Inventor 2)				
	Tatsuo K	AWAGUCHI			
	(Inve	ntor 3)			
	(Inve	ntor 4)			
	(Inve	ntor 5)			
	(Inve	ntor 6)			
	(Inve	ntor 7)			
	(Inve	ntor 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			
Name of Assignee NGK Insulators, Ltd.					
Address of Assignee 2-56, Suda-cho, Mizuho-ku, Nagoya-city,					
Addicss of Assigned	Aichi-prefecture, 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		entire right, title and interest for the United			
及び全ての特許権に関する合衆国、その領		States, its territories, dependencies and			
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利、所有権および利益を譲渡することに同意		applications for patent and any Letters Patent			
し、その結果、譲渡および移転し、		which may be granted therefor, known as			
LESS-DUST-GENERATIVE PIEZOELECTRIC/ELECTROSTRICTIVE DEVICE					
AND MANUFACTUR	NG METHOD				
(Identification of Invention, such as Title, Case Number or Foreign Application Number)					

前記発明は、本前記署名人が下記の日付・出 願番号でアメリカ合衆国において特許出願を 履行したものである。					
on (Insert Date of Signing of Application)					
U.S. Application(s) Serial Number(s) filed					
1) 本署名人(ら) は本出願、その継続出願およびその分割出願に関する全ての必要書類を履行することに同意し、譲受人が必要と思われる、これらの出願に関して別途譲渡証を履行することに同意する。	1) The undersigned agree(s) to execute all papers necessary in connection with the application 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.				
2) 本署名人(ら)は、本出願もしくはその継続出願、もしくはその分割出願に関して宣言されるインターフェアレンスに関して必要な全ての書類を履行することに同意し、証拠取得およびそのようなインターフェアレンスの進行にあたり起こりうるいかなる方法においても前記譲受人と協力することに同意する。	2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation or division thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.				
3) 本署名人(ら) は、すべての用紙および書類を履行し、国際工業所有権保護協定の請求もしくは規定もしくは類似協定に関して必要ないかなる行為を施行することに同意する。	3) The undersigned agree(s) to execute all papers and documents and 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.				
4) 本署名人(ら)は、前記譲受人に対して、有効な米国特許の許可を取得するために必要なすべての積極的な行為を履行することに同意する。	4) 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.				
5) 本署名人(ら)は、本出願もしくはその分割出願もしくはその継続出願から発生したすべての米国特許を、全ての利益の譲受人として前記譲受人に対して発行することを特許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のすべての権利を有し、対立関係にある協定を過去に履行することもなく、もしくは将来履行しないことを誓約する。	5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or 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 executed and will not execute, any agreement in conflict herewith.				

- 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).					
Date September 29, 2003	Signature _	Yukihisa Takenchi	_(SEAL)		
Date <u>September 29, 2003</u>	Signature _	Koji Kimura	_(SEAL)		
Date September 29, 2003	Signature	Tatsuo Kawaguchi	_(SEAL)		
Date	Signature .		_(SEAL)		
Date	Signature .		_(SEAL)		
Date	Signature		_(SEAL)		
Date	Signature		_(SEAL)		
Date	Signature		_(SEAL)		

RECORDED: 10/03/2003