FORM PTO-1595 (Rev. 6/93)

08-28-2000

U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

R 10144	4036 EET					
8:2:107	Attorney's Docket No. <u>004501-052</u>					
To the Honorable Commissioner of Patents and Tradentarks. Please record the attached original documents or copy thereof.						
1. Name of conveying party(ies): 1) Armin HEGER; 2) Stefan REH; 3) Andreas PFEIFFER and 4) Axel RANZMANN Additional name(s) of conveying party(ies) attached? [] Yes [X] No 3. Nature of conveyance: [X] Assignment [] Merger [] Security Agreement [] Change of Name	2. Name and address of receiving party(ies): Name: ABB RESEARCH LTD. Address: CH-8050 Zürich, Switzerland					
Other: Execution Date: June 16, 1998	Additional name(s) & address(es) attached? [] Yes [X] No					
 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the A. Patent Application No.(s) 09/119,670 Additional numbers attach 	B. Patent No.(s)					
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: One (1)					
Name: Robert S. Swecker, Esquire Address: Burns, Doane, Swecker & Mathis, L.L.P. P.O. Box 1404 Alexandria, Virginia 22313-1404	7. Total fee (37 CFR § 3.41): \$ 40.00 [X] Enclosed [X] Authorized to be charged to deposit account, if necessary 8. Deposit account number: 02-4800					
DO NOT USE	THIS SPACE					
9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true a. Robert S. Swecker Name of Person Signing	Signature August 2, 2000 Date Total number of pages including cover sheet, attachments, and document: 3					

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231

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604501-052 Attorney's Docket No.

ASSIGNMENT

(JOINT)

THIS ASSIGNMENT, by Armin Heger, Stefan Reh, Andreas Pfeiffer,

Axel Kranzmann residing at CH-5415 Nusshaumen. S	, and
, residing at our sites massible and the	Switzerland,
CH-5200 Brugg, Switzerland, D-79787 Lauchringen,	Germany
	_
D-70182 Stuttgart, Germany	and
referred to as "the Assignors"), respectively, witnesseth:	(hereinafter
referred to as the Assignors 7, respectively, withesseth:	
WHEREAS, the Assignors have invented certain new and use	£ :
Ceramic lining	Tui improvements in
[] which is a provisional application to be filed herewith; [x] which is a nor	province of an elimination
having an oath or declaration executed on even date herewith prior to	filing of application
bearing Application No, and filed on	ming of application; []
, and med on	; and
WHEREAS, ABB Research Ltd	a acrossian dut.
whereas, ABB Research Ltd organized under and pursuant to the laws of Switzerland organized place of business at CH=8050 Zirich Switzerland	, a corporation duly
principal place of business at CH-8050 Zürich, Switzerland	and having its
(hereinafter referred t	ro oo "the Appinger") is
desirous of acquiring the entire right, title, and interest in and to said inve	.o as the Assignee), is
applications on said inventions and the entire right, title and interest in a	entions, the right to file
including provisional applications for Letters Patent of the United States or o	nd to any applications,
priority to said application, and in and to any lattern Patent or Patents.	other countries claiming
priority to said application, and in and to any Letters Patent or Patents, Un to be obtained therefor and thereon.	nited States or foreign,
to be obtained therefor and thereon.	

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said application, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefor and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisions applications, above-mentioned, and that the same are unencumbered, and that the

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Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said inventions, the Letters Patent to be issued for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

Date _	98-06-16	_ Name of Assignor	Armin Hege r	Ann	Henr
	98-06-16		/	Pay	
Date _	98-06-16	_ Name of Assignor	Andreas Pfeiffe	A	12/10
Date _	98-06-16	_Name of Assignor	Axel Kranzmann	And O	Smilm
Date _		_Name of Assignor	· · · · · · · · · · · · · · · · · · ·		
Date _		Name of Assignor		7	
Date _		Name of Assignor			
Date _	****	Name of Assignor_		4. · · · · · · · · · · · · · · · · · · ·	

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RECORDED: 08/02/2000