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Atty Docket No.:

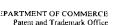
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05-22-2001



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To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof. 1. Name of conveying party(ies): 2. Name and address of receiving party(ies): Nobumi HARADA, Satoshi SUGA, Hiroshi TADANO and TDK CORPORATION Name: Hideki HASEGAWA Address: 13-1, Nihonbashi 1-chome, Chuo-ku, Tokyo, Japan Additional name(s) of conveying party(ies) attached? □Yes ■No 3. Nature of Conveyance: Assignment □ Merger □ Security Agreement □ Change of Name □ Other Execution Date: February 13, 2001 Additional name(s) and address(es) attached? □Yes ■No 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) 09/799,569 Additional numbers attached? □Yes ■No 5. Name and address of party to whom correspondence 6. Total applications and patents involved: concerning document should be mailed: 7. Total fee (37 CFR 3.41): \$40.00 ■ Enclosed □ Authorized to be charged to deposit account 15-0030 8. Deposit account number: 22850 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE 9. 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. Marvin J. Spivak Signature Name of Person Signing Joseph A. Scafetta, Jr. 24,913 Registration Number: Registration No. 26,803 Total number of pages including this cover sheet: 00600066 09799569 /2001 PHYRME 40,00 00 Do not detach this portion Mail documents to be recorded with required cover sheet information to:

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

> PATENT REEL: 011809 FRAME: 0092

07/199,569

Assignment Of Application

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	WHEREAS, I (WE) Nobumi HARADA, Satoshi SUGA, Hiroshi TADANG
	and Hideki HASEGAWA all of Tokyo, Japan
SERT NAMES D RESIDENCE DRESSES OF E INVENTORS:	
	, respectively,
SERT TITLE	have invented certain new and useful improvements in:
	FRONT END MODULE FOR MOBILE COMMUNICATIONS APPARATUS
SERT DATE IN- NTORS SIGNED CLARATION:	for which an application for Letters Patent was executed on February 13, 2001
	(Application No. 09/799,569, filed March 7, 2001), and
SERT NAME ND ADDRESS OF OMPANY OR	WHEREAS,TDK CORPORATION
THER ASSIGNEE:	(hereinafter referred to as "ASSIGNEE") having a place of business at:
	13-1, Nihonbashi 1-chome, Chuo-ku, Tokyo, Japan
	is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and ir any and all foreign countries;

NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I (WE), by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.

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I (WE) hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my (our) entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me (us) had this Assignment and sale not been made.

Further, I (WE) agree that I (WE) will communicate to said ASSIGNEE or its (his) representatives any facts known to me (us) respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letter Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.

The undersigned hereby grant(s) the firm of Oblon, Spivak, McClelland, Maier & Neustadt, P.C. of Fourth Floor, 1755 Jefferson Davis Highway, Arlington, Virginia 22202 the power to insert on this assignment any further identification, including the application number and filing date, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Date:	February 13, 2001	Nobumi Harada (Signature of Inventor)
Date:	February 13, 2001	Satoshi 7uga (Signature of Inventor)
Date:	February 13, 2001	Plaroshu Tadano (Signature of Inventor)
Date:	February 13, 2001	Wide kir Idasl Jaua (Signature of Inventor)
Date:		(Signature of Inventor)
Date:		(Signature of Inventor)
Date:		(Signature of Inventor)
Date:		(Signature of Inventor)

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C. ATTORNEYS AT LAW FOURTH FLOOR 1755 JEFFERSON DAVIS HIGHWAY ARLINGTON, VIRGINIA 22202

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PATENT REEL: 011809 FRAME: 0094

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