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4. Application number(s) or	patent number((s):			
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Shaowei ZHU, Shin KAWANO, Masafumi NOGAWA <i>O</i> and Tatsuo INOUE			Name: Address:		SEIKI KABUSHIKI KAISHA
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PATENT REEL: 011037 FRAME: 0851

	WHEREAS, I (WE)Shaowei ZHU of Kariya-shi, JAPAN and					
	Shin KAWANO of Kariya-shi, JAPAN and					
SERT NAMES ND RESIDENCE DDRESSES OF HE INVENTORS:	Masafumi NOGAWA of Toyota-shi, JAPAN and					
	Tatsuo INOUE of Anjo-shi, JAPAN and					
	<u> </u>					
SERT TITLE	, respectively,					
F INVENTION:	have invented certain new and useful improvements in: PULSE TUBE REFRIGERATOR					
ISERT DATE IN- ENTORS SIGNED ECLARATION:	for which an application for Letters Patent was executed on X May 25, 2000					
	(Application No. 09/539, 324, filed March 30, 2000), and					
SERT NAME ND ADDRESS OF OMPANY OR THER ASSIGNEE:	WHEREAS, AISIN SEIKI KABUSHIKI KAISHA					
	(hereinafter referred to as "ASSIGNEE") having a place of business at: 1, Asahi-machi					
	2-chome, Kariya-shi, Aichi-ken, 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 in any and all foreign countries;					

NOW, THEREFORE, for good and valuable consideration which is hereby acknowledged, 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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PATENT REEL: 011037 FRAME: 0852 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: X May 25, 2000	x Shaowei Zhu (Signature of Inventor) Shaowei ZHU
Date: X May 25, 2000	X Shin Kawana (Signature of Inventor) Shin KAWANO
Date: X May 25, 2000	x Musulumi Nogawa (Signature of Inventor Masafumi NOGAWA
Date: X May 25, 2000	X Stano roll (Signature of Inventor) Tatsuo INOUE
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: 011037 FRAME: 0853

RECORDED: 08/07/2000