



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<b>(21) International Application Number:</b> PCT/US99/12936 <b>(22) International Filing Date:</b> 9 June 1999 (09.06.99)  <b>(30) Priority Data:</b> 60/088,621              9 June 1998 (09.06.98)              US  <b>(71) Applicant:</b> MASSACHUSETTS INSTITUTE OF TECHNOLOGY [US/US]; 77 Massachusetts Avenue, Cambridge, MA 02139 (US).  <b>(72) Inventor:</b> IWASA, Yukikazu; 693 Wellesley Street, Weston, MA 02493 (US).  <b>(74) Agents:</b> REYNOLDS, Leo, R. et al.; Hamilton, Brook, Smith & Reynolds, P.C., Two Militia Drive, Lexington, MA 02421 (US).	<b>(81) Designated States:</b> CA, JP, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  <b>Published</b> <i>With international search report.</i>  <b>(88) Date of publication of the international search report:</b> 27 April 2000 (27.04.00)	
<b>(54) Title:</b> METHOD FOR CURRENT SHARING IN A SUPERCONDUCTING CURRENT LEAD		
<b>(57) Abstract</b>  A current lead including a high-temperature superconductor and a normal conductive component is coupled to a superconducting device. Electric current is delivered through the current lead at a level above the critical current carrying capacity of the high-temperature superconductor, creating a current-sharing mode of conductance through at least part of both the superconducting component and the normal conductive component.		

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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 99/12936

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 6 H01F6/06 H01L39/14

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 6 H01F H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 44 30 408 A (SIEMENS AG) 27 July 1995 (1995-07-27) abstract	1
A	US 5 686 876 A (YAMAMOTO KAZUTAKA ET AL) 11 November 1997 (1997-11-11) claim 1	1

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Name and mailing address of the ISA

European Patent Office, P. B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Pelsers, L

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 99/12936

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 4430408	A	27-07-1995	NONE	
US 5686876	A	11-11-1997	JP 7142237 A	02-06-1995