



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
01.09.2010 Bulletin 2010/35

(51) Int Cl.:
H01H 33/66 (2006.01)

(43) Date of publication A2:
15.07.2009 Bulletin 2009/29

(21) Application number: **08021300.2**

(22) Date of filing: **08.12.2008**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR
Designated Extension States:
AL BA MK RS

(72) Inventors:
• **Morita, Ayumu**
Tokyo 100-8220 (JP)
• **Tsuchiya, Kenji**
Tokyo 100-8220 (JP)

(30) Priority: **09.01.2008 JP 2008001750**

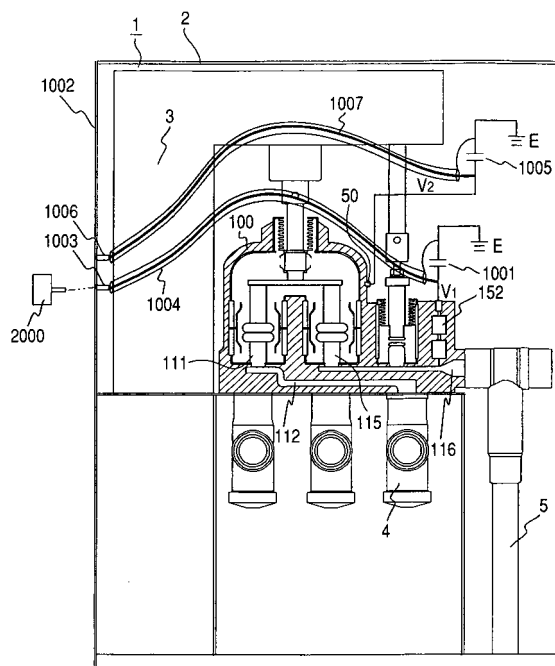
(74) Representative: **Strehl Schübel-Hopf & Partner**
Maximilianstrasse 54
80538 München (DE)

(71) Applicant: **Hitachi Ltd.**
Chiyoda-ku
Tokyo 100-8280 (JP)

(54) **Vacuum switchgear and a method of diagnosing vacuum pressure thereof**

(57) A vacuum switchgear comprising: a casing; a vacuum switch, enclosed in the casing, comprising a metal vessel covered with a solid insulator, the surface of the insulator being covered with a conductive layer to be earthed, a pair of movable electrode and a fixed electrode to constitute a main circuit, enclosed in the metal vessel; a first condenser connected to the terminal on the solid insulator. A first electric connection means and second connecting means are disposed to the casing, and the first connecting means is connected to a first condenser and the second connecting means is connected to the second condenser. A voltage indicator that indicates a status of vacuum of the metal vessel and a status of power application to a main circuit of the switch section is electrically connected to either the first or second connecting means.

FIG. 1





EUROPEAN SEARCH REPORT

Application Number
EP 08 02 1300

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Y	EP 1 763 049 A1 (HITACHI LTD [JP]) 14 March 2007 (2007-03-14) * paragraph [0011] - paragraph [0030]; figures 1-12 *	1-9	INV. H01H33/66
Y	JP 61 263015 A (MEIDENSHA ELECTRIC MFG CO LTD) 21 November 1986 (1986-11-21) * the whole document *	1-9	
Y	US 4 937 698 A (TOYA HIDEAKI [JP] ET AL) 26 June 1990 (1990-06-26) * column 3, line 1 - column 4, line 24; figures 1-3 *	1-9	
A	DE 43 10 619 A1 (FUJI ELECTRIC CO LTD [JP]) 14 October 1993 (1993-10-14) * column 5, line 54 - column 13, line 26; figures 1-12 *	1	
			TECHNICAL FIELDS SEARCHED (IPC)
			H01H
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 28 July 2010	Examiner Nieto, José Miguel
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

1
EPO FORM 1503 03.02 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 08 02 1300

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

28-07-2010

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1763049	A1	14-03-2007	CN 1933078 A	21-03-2007
			JP 4169024 B2	22-10-2008
			JP 2007080594 A	29-03-2007
			SG 131045 A1	26-04-2007

JP 61263015	A	21-11-1986	JP 1719884 C	14-12-1992
			JP 4003614 B	23-01-1992

US 4937698	A	26-06-1990	DE 3837605 A1	24-05-1989
			GB 2212282 A	19-07-1989
			JP 1122530 A	15-05-1989

DE 4310619	A1	14-10-1993	JP 3168751 B2	21-05-2001
			JP 6060780 A	04-03-1994
			US 5399973 A	21-03-1995
