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EP 0 723 276 A3 (11)

EUROPEAN PATENT APPLICATION (12)

(88) Date of publication A3: 18.06.1997 Bulletin 1997/25 (51) Int. CI.6: H01C 7/04, C04B 35/01

(43) Date of publication A2: 24.07.1996 Bulletin 1996/30

(21) Application number: 96100708.5

(22) Date of filing: 18.01.1996

(84) Designated Contracting States: DE FR GB IT NL

(30) Priority: 18.01.1995 JP 5870/95

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- (54)Semiconductor ceramic having negative resistance/temperature characteristics and semiconductor ceramic component utilizing the same
- (57) There is provided a semiconductor ceramic having negative resistance/temperature characteristics constituted by a YCaMn type oxide ceramic expressed by the formula $Y_{1-x}Ca_xMnO_3$ (x = 0.2 to 0.6). Further, there is provided a semiconductor ceramic component including a ceramic body having negative resistance/temperature characteristics and electrodes formed on the ceramic body. The ceramic body is made of a YCaMn type oxide ceramic expressed by the formula $Y_{1-x}Ca_xMnO_3$ (x = 0.2 to 0.6).



EUROPEAN SEARCH REPORT

Application Number EP 96 10 0708

Category	Citation of document with in of relevant pa	ndication, where appropriate, ssages	Relevant to claim	CLASSIFICATION OF THI APPLICATION (Int.Cl.6)	
X	JOURNAL OF SOLID STATE CHEMISTRY, MAY 1991, USA, vol. 92, no. 1, ISSN 0022-4596, pages 116-129, XP000646234 KOBAYASHI T ET AL: "Metal-insulator transition and thermoelectric properties in the system (R/sub 1-x/Ca/sub x/)Mn0/sub 3- delta / (R:Tb, Ho, Y)" * abstract; figures 3,4 * * page 117, column EXP * * page 120 - page 123 *		1,2	H01C7/04 C04B35/01	
Α	, , , , , ,		3-8		
A	EP 0 350 770 A (TDK * page 2, line 5 -	CORP) 17 January 1990 page 3, line 2 *	3-8		
A	1993	JAPAN C-1142), 15 December MURATA MFG CO LTD), 7	1-8		
	September 1993, * abstract *			TECHNICAL FIELDS SEARCHED (Int.Cl.6)	
A	1994	JAPAN E-1489), 13 January TDK CORP), 8 October		H01C C04B	
P,X	PATENT ABSTRACTS OF vol. 95, no. 009 & JP 07 247165 A (September 1995, * abstract *		1-8		
	The present search report has h				
	Place of search THE HAGUE	Date of completion of the search 25 March 1997	Wi	Examiner rner, C	
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category		NTS T: theory or princ E: earlier patent after the filing other D: document cite L: document cite	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		
A : technological background O : non-written disclosure P : intermediate document			&: member of the same patent family, corresponding document		