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(54) Title: DIELECTRIC CERAMIC COMPOSITION

(57) Abstract: It is an object of the invention to provide a dielectric ceramic composition which enables its firing temperature to be lowered and which has an excellent electrical properties, particularly temperature dependence of resonance frequencies. A dielectric ceramic composition according to the invention comprises an oxide of a barium titanate family having a composition formula represented as $\text{BaTi}_x\text{O}_{2x+1}$ ($3.5 \leq x \leq 5.0$); a first chemical element group consisting of at least one kind of alkaline-earth metals, silicon, zinc, aluminium, titanium, copper, bismuth and molybdenum; and a second chemical element group consisting of at least one kind of alkali metals and boron. A weight ratio of a total of each chemical element in the first and second chemical element groups to the oxide (the total of each chemical element / the oxide) is between 45/55 and 65/35 inclusive when the ratio is determined by converting said each chemical element to its oxide. A weight ratio of the second chemical element group to the first chemical element group (the second chemical element group / the first chemical element group) is between 0.01 and 0.10 inclusive when the ratio is determined by converting said each chemical element to its oxide.

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A. CLASSIFICATION OF SUBJECT MATTER

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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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)

EPO-Internal, PAJ, WPI Data, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 541 397 A (NGK INSULATORS LTD) 12 May 1993 (1993-05-12) page 4, line 37 -page 5, line 58; table 1 page 4, line 20 - line 26 ---	1,5
X	DE 100 55 307 A (MURATA MANUFACTURING CO) 17 May 2001 (2001-05-17) page 2, line 51 -page 3, line 59; tables 1-6 ---	1,2,5
A	US 5 759 935 A (OZEKI HIROFUMI ET AL) 2 June 1998 (1998-06-02) column 3, line 22 -column 4, line 25 --- -/--	1

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to Claim No.
A	DATABASE WPI Section Ch, Week 199924 Derwent Publications Ltd., London, GB; Class L03, AN 1999-280679 XP002237779 & JP 10 324568 A (MEIWA KOGYO KK), 8 December 1998 (1998-12-08) abstract -----	1

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