

Title (en)  
SUPERCONDUCTING METAL OXIDE COMPOSITIONS AND PROCESSES FOR MANUFACTURE AND USE

Publication  
**EP 0441903 A4 19911204 (EN)**

Application  
**EP 90903287 A 19891016**

Priority  
US 26618088 A 19881102

Abstract (en)  
[origin: WO9005384A1] Compositions having the nominal formula  $TiBa_aCa_bCu_cO_x$ , wherein a is from about 2 to 4, b is from about 7/2 to 5, c is from about 9/2 to 7,  $x = (a + b + c + y)$ , where y is from about 1/2 to 3, are superconducting. Processes for manufacturing such compositions and for using them are disclosed.

IPC 1-7  
**H01L 39/12**; **C01F 1/00**; **C01F 11/00**; **C01G 3/02**; **C01G 15/00**

IPC 8 full level  
**C01G 15/00** (2006.01); **C01G 1/00** (2006.01); **C04B 35/45** (2006.01); **H01L 39/12** (2006.01); **H01L 39/22** (2006.01)

IPC 8 main group level  
**H01L** (2006.01)

CPC (source: EP KR)  
**C01F 1/00** (2013.01 - KR); **C04B 35/4512** (2013.01 - EP); **H10N 60/857** (2023.02 - EP)

Citation (search report)

- [X] PROCEEDINGS OF THE INT. SYMPOSIUM ON SUPERCONDUCTIVITY August 29, 1988, TOKYO, JP pages 793 - 798; H. IHARA ET AL.: 'New Tl-Ba-Ca-Cu-O (1234, 1245 and 2234) Superconductors with very high  $T_c$  '
- [A] NATURE vol. 334, August 11, 1988, LONDON, GB pages 510 - 511; H. IHARA ET AL.: 'A ne high- $T_c$   $TiBa_2Ca_3Cu_4O_{11}$  superconductor with  $T_c > 120K$  '
- [XP] PHYSICA C vol. 159, no. 6, August 1, 1989, AMSTERDAM, NL pages 801 - 810; P.L. GAI ET AL.: 'Microstructure and microchem. of defects and interfaces in  $Tl_2Ba_2Ca_3Cu_4O_{12}$ ,  $TlBa_2Ca_4Cu_5O_{13}$  and  $(Tl,Pb)Sr_2Can-1Cu_nO_{2n+3}(n=2,3)$  oxide superconductors '
- See references of WO 9005384A1

Designated contracting state (EPC)  
AT CH DE FR GB IT LI NL

DOCDB simple family (publication)  
**WO 9005384 A1 19900517**; AU 5096990 A 19900528; CA 2002022 A1 19900502; DK 72091 A 19910419; DK 72091 D0 19910419; EP 0441903 A1 19910821; EP 0441903 A4 19911204; JP H04501553 A 19920319; KR 900701659 A 19901204; NO 911667 D0 19910426; NO 911667 L 19910426

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**US 8904477 W 19891016**; AU 5096990 A 19891016; CA 2002022 A 19891101; DK 72091 A 19910419; EP 90903287 A 19891016; JP 50350090 A 19891016; KR 900701396 A 19900630; NO 911667 A 19910426