

Title (en)

ELECTRICAL-RESISTANCE COMPOSITION AND METHOD OF MAKING ELECTRICAL-RESISTANCE ELEMENTS

Publication

**EP 0163004 B1 19880107 (DE)**

Application

**EP 85101524 A 19850213**

Priority

US 61520484 A 19840530

Abstract (en)

[origin: US4536328A] A composition for making electrical resistance elements including a conductive component which comprises (a) a precious metal oxide of the formula  $A'1-xA''xB'1-yB''yO_3$ , wherein when  $A'$  is Sr;  $A''$  is one or more of Ba, La, Y, Ca and Na, and when  $A'$  is Ba,  $A''$  is one or more of Sr, La, Y, Ca and Na;  $B'$  is Ru;  $B''$  is one or more of Ti, Cd, Zr, V and Co,  $0 < x < 0.2$ ;  $0 < y < 0.2$ ; (b) a binder component which comprises (i) between 40 weight percent and 75 weight percent  $C'$ , wherein  $C'$  is  $SrO$  when  $A'$  is Sr,  $C'$  is  $BaO$  when  $A'$  is Ba, and  $C'$  is  $SrO+BaO$  when  $A'$  is Sr and  $A''$  is Ba and when  $A'$  is Ba and  $A''$  is Sr, (ii) between 20 weight percent and 35 weight percent  $B_2O_3$ , (iii) between 2 weight percent and 12 weight percent  $SiO_2$ , and (iv) between 0.5 weight percent and 6.5 weight percent  $ZnO$ . The method of the present invention includes mixing the conductive component and binder as described above with an organic vehicle.

IPC 1-7

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IPC 8 full level

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