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(72) Inventors:
• **Sugimura, Toshikazu**
Ohtsu-shi, Shiga (JP)
• **Narita, Maki**
Ohtsu-shi, Shiga (JP)

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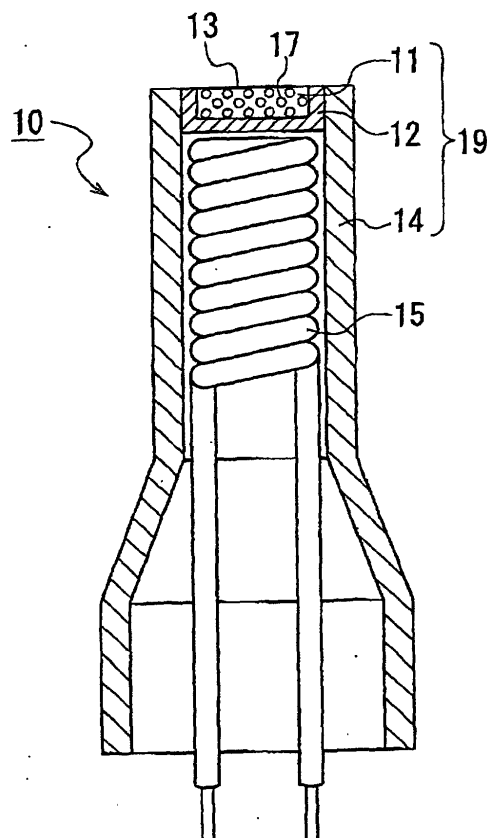
(74) Representative: **Ilgart, Jean-Christophe et al**
BREVALEX
3, rue du Docteur Lancereaux
75008 Paris (FR)

(71) Applicant: **NEC Electronics Corporation**
Kawasaki, Kanagawa 211-8668 (JP)

(54) **Cathode subassembly and color crt equipped therewith**

(57) A cathode subassembly for color CRTs is provided, which exhibits scarcely the degradation of electron emission capability for at least ordinary lifetime of color CRTs even at a high current density greater than 1 A/cm² while it has an equivalent activation time and an equivalent operating temperature to those of former oxide cathodes. The cathode subassembly comprises (a) a porous cathode pellet (11) formed by a sintered body containing Ni, scandium oxide (Sc₂O₃), and an electron-emissive material; the body being made by sintering a mixture of a Ni powder, a scandium oxide (Sc₂O₃) powder, and an electron-emissive material powder using a HIP process; the pellet having an electron emission surface; and (b) a pellet support (12) for supporting the pellet; the support having a part in contact with the pellet; the part being made of an alloy containing Ni as its main ingredient and at least one metal selected from the group consisting of chromium (Cr), tantalum (Ta), molybdenum (Mo), zirconium (Zr), tungsten (W), and cobalt (Co); the at least one metal selected from the group consisting of Cr, Ta, Mo, Zr, W, and Co serving as a reducing agent for the electron-emissive material. Preferably, the electron-emissive material is a carbonate generated by co-precipitation of Ba, Sr, and Ca.

FIG. 2



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EUROPEAN SEARCH REPORT

Application Number
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Place of search Munich		Date of completion of the search 20 July 2004	Examiner Ruiz Perez, S
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			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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