

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2008/0026207 A1 FINK-PETRI et al.

Jan. 31, 2008 (43) **Pub. Date:**

(54) PIGMENTED CERAMIC PIECE

(75) Inventors: Alke FINK-PETRI,

Bussigny-Lausanne (CH); Heinrich HOFMANN, Pully (CH)

Correspondence Address:

HATTORI, DANIELS WESTERMAN, ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW, SUITE 700 **WASHINGTON, DC 20036**

(73) Assignee: ROLEX S.A, Geneva (CH)

(21) Appl. No.: 11/831,245

(22) Filed: Jul. 31, 2007

(30)Foreign Application Priority Data

(EP) 06405325.9

Publication Classification

(51) Int. Cl.

B32B 5/16 (2006.01)B28B 1/00 (2006.01)

(52) **U.S. Cl.** **428/328**; 264/603; 428/330

ABSTRACT

The invention relates to a piece comprised in part or in full of a pigmented ceramic in which the pigment is comprised of nanoparticles based on a metal from column IB of the periodic table of the elements or of an alkaline metal, or an alloy of both, coated with a layer of silica, the silica being crystalline silica, particularly cristobalite or tridymite. The ceramic is preferably zirconia or alumina. The nanoparticle silica is crystallized, for example, by a thermal treatment in air or under inert gas at temperatures of between 900° C. and 1400° C. The piece is made by sintering a nanoparticle/ ceramic mixture in air or under inert gas at temperatures of between 900° C. and 1250° C.