

Title (en)

Ceramics for decorative component and decorative component for watch using the same

Title (de)

Keramik für ein Dekorelement und Dekorelement für eine Uhr die dieselbe verwendet

Title (fr)

Céramique pour élément décoratif et élément décoratif pour montre qui l'utilise

Publication

EP 1767661 A1 20070328 (EN)

Application

EP 06120791 A 20060915

Priority

- JP 2005279622 A 20050927
- JP 2005343737 A 20051129
- JP 2006077303 A 20060320
- JP 2006231915 A 20060829

Abstract (en)

To provide ceramics for decorative component, which give high-grade impression, aesthetic satisfaction and mind soothing effect with golden color tone which is popular in the marketplace, and a decorative component for a watch that uses the same. The ceramics for decorative component comprise titanium nitride as a main component, nickel as the auxiliary component, and at least one kind selected from among a group of vanadium nitride, niobium nitride, tantalum nitride, molybdenum carbide, niobium carbide, tungsten carbide and tantalum carbide as an additional component, wherein the arithmetic mean height Ra of at least the decorative surface is 0.03 μm or less, and the decorative surface has such a color tone that lightness index L^* is in a range from 72 to 84, and chromaticness indices a^* and b^* are from 4 to 9 and 28 to 36, respectively, in the $L^*a^*b^*$ color space of CIE1976. This constitution increases the reflectivity of the decorative surface to light, and improves the luster of the color tone, thus achieving high-grade impression and aesthetic satisfaction.

IPC 8 full level

C22C 14/00 (2006.01); **C22C 1/05** (2006.01); **C22C 29/00** (2006.01); **C22C 29/16** (2006.01)

CPC (source: EP US)

A44C 27/001 (2013.01 - EP); **C22C 1/055** (2013.01 - EP); **C22C 29/005** (2013.01 - EP US); **C22C 29/16** (2013.01 - EP); **G04B 37/225** (2013.01 - EP); **B22F 2003/247** (2013.01 - EP); **B22F 2009/042** (2013.01 - EP); **B22F 2998/00** (2013.01 - EP); **B22F 2998/10** (2013.01 - EP)

C-Set (source: EP US)

EP

1. **B22F 2998/00 + B22F 3/1021 + B22F 2201/02 + B22F 2201/10 + B22F 2201/20**
2. **B22F 2998/00 + B22F 3/02 + B22F 3/04 + B22F 3/20 + B22F 3/225**
3. **B22F 2998/10 + B22F 9/04 + B22F 1/10 + B22F 3/02 + B22F 3/1021 + B22F 3/24**

US

B22F 2998/10 + B22F 9/04 + B22F 1/10 + B22F 3/02 + B22F 3/1021 + B22F 3/24

Citation (search report)

- [X] US 3669695 A 19720613 - ILER RALPH K, et al
- [X] EP 0520465 A1 19921230 - KYOCERA CORP [JP]
- [X] US 3671201 A 19720620 - BERGNA HORACIO E
- [X] CH 553253 A 19740830 - CITIZEN WATCH CO LTD
- [X] US 4589917 A 19860520 - NAGATO YOSHIO [JP]
- [AD] JP 2003013154 A 20030115 - KYOCERA CORP & CH 695421 A5 20060515 - KYOCERA CORP [JP]

Cited by

CN110157931A; EP2298948A4; FR3141632A1; EP2226404A4; US2010319383A1; US8608330B2; US2016208366A1; US9816162B2; US2012115706A1; EP2423343A4; CN115988974A; WO2009145146A1; WO2010123104A1; WO2009069549A1

Designated contracting state (EPC)

CH LI

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1767661 A1 20070328; JP 2007284779 A 20071101; JP 5342740 B2 20131113

DOCDB simple family (application)

EP 06120791 A 20060915; JP 2006231915 A 20060829