



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**03.09.2014 Bulletin 2014/36**

(51) Int Cl.:  
**A44C 5/10 (2006.01)**

(43) Date of publication A2:  
**02.11.2011 Bulletin 2011/44**

(21) Application number: **11163969.6**

(22) Date of filing: **27.04.2011**

(84) Designated Contracting States:  
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR**  
 Designated Extension States:  
**BA ME**

(72) Inventor: **Eun, Kyoung-A**  
**462-739, Gyeonggi-do (KR)**

(74) Representative: **Margotti, Herwig Franz**  
**Schwarz & Partner**  
**Patentanwälte**  
**Wipplingerstrasse 30**  
**1010 Wien (AT)**

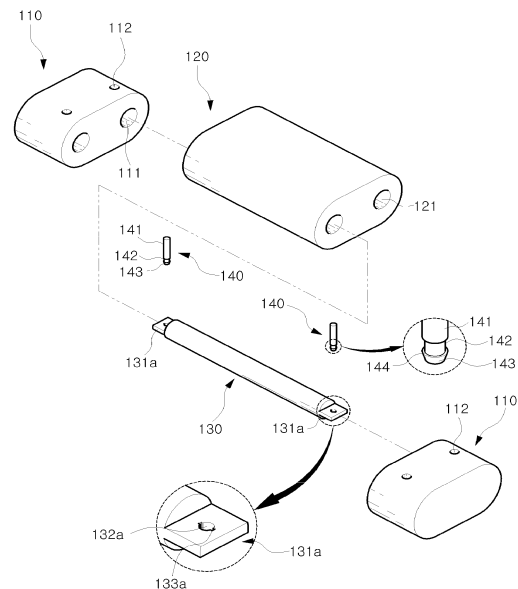
(30) Priority: **28.04.2010 KR 20100039600**

(71) Applicant: **Ceraarts, Ltd.**  
**Gyeonggi-do 462-739 (KR)**

(54) **Watch strap having permanent assembly structure based on characteristics of ceramics**

(57) The present invention relates to a watch strap, which is made of a special material such as ceramics to have high strength and a smooth surface and includes a permanent assembly structure allowing easy securing of fastening pins (140) through press-fitting of the fastening pins while providing high fastening force. The watch strap includes outer connecting pieces (110), each including a pair of pin grooves (111) formed at one side thereof and a pair of insertion grooves (112) formed at a back side thereof to communicate with the corresponding pin grooves, a central connecting piece (120) having a pair of pin holes (121) penetrating the central connecting piece to correspond to the pin grooves of the outer connecting pieces, connecting pins (130) each including a fastening part (131a) having fastening holes (132a) formed at opposite ends of the fastening part, and a fastening pin having a latching step (144) formed at one end of the fastening pin. The fastening part of each of the connecting pins is inserted into the pin groove of the outer connecting piece through the pin hole of the central connecting piece, and the fastening pin is press-fitted into the fastening hole of the connecting pin through the insertion hole of the outer connecting piece and supported on the connecting pin by the latching step.

[Figure 3]





EUROPEAN SEARCH REPORT

Application Number  
EP 11 16 3969

5

10

15

20

25

30

35

40

45

50

55

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 7 146 793 B1 (HYUN MIN K [KR] HYUN MIN KYUNG [KR]) 12 December 2006 (2006-12-12) * abstract; figures 3-5 * * column 3, line 11 - column 4, line 13 * -----	1-12	INV. A44C5/10
A	CH 695 037 A5 (NAMIKI PRECISION JEWEL CO LTD [JP]) 30 November 2005 (2005-11-30) * abstract; figures 1-21a * * column 4, line 43 - column 11, line 29 * -----	1	
A	CH 698 226 A2 (FOUR CREATORS CO LTD [JP]; KYOCERA CORP [JP]) 15 June 2009 (2009-06-15) * abstract; figures 1-13 * -----	1	
			TECHNICAL FIELDS SEARCHED (IPC)
			A44C
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 28 July 2014	Examiner Contreras Aparicio
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	

EPO FORM 1503/03/82 (F04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.

EP 11 16 3969

5

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

28-07-2014

10

15

20

25

30

35

40

45

50

55

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 7146793	B1	12-12-2006	AT 382278 T	15-01-2008
			DE 602005004138 T2	28-08-2008
			EP 1738665 A1	03-01-2007
			JP 4386884 B2	16-12-2009
			JP 2007000601 A	11-01-2007
			KR 200395360 Y1	08-09-2005
			US 7146793 B1	12-12-2006
-----				
CH 695037	A5	30-11-2005	CH 695037 A5	30-11-2005
			DE 10194819 T1	13-03-2003
			WO 0152682 A1	26-07-2001
-----				
CH 698226	A2	15-06-2009	CH 698226 A2	15-06-2009
			JP 3140055 U	13-03-2008
-----				

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82