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## **EUROPEAN PATENT APPLICATION**

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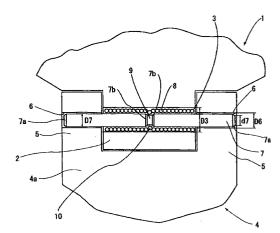
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#### (54) Joint structure for watch and watchband

(57)To obtain a joint structure for a watch and the watch that is produced in low cost, enhanced in a design aspect and more aesthetic and free watch, and which is simple in attachment/detachment work for each joint portion to avoid a fear that a joint pin would be fallen away in case of use, the watch joint structure and the watch using the joint structure are provided in which a case joint portion (2) for joint provided in a watch case (1) and a band joint portion (4a) for joint provided in a band (4) are arranged adjacent to each other in a lateral direction, engagement holes (3), (6) and (6) in communication with each other in a lateral direction are provided in two joint portions (1) and (4a), respectively, and a joint pin (7) for coupling the watch case (1) and the band (4) is passed through the respective engagement holes (6), (3) and (6). Then, a coiled spring (8) is inserted into at least either one of the two engagement holes (3) and (6), and the joint pin (7) is inserted into an inner diameter of the coiled spring (8) so that the joint pin is retained by the inner diameter portion of the coiled spring and is applied to the two engagement holes (6), (3) and (6).

[Fig 2]





# **EUROPEAN SEARCH REPORT**

Application Number EP 00 30 3186

Category	Citation of document with indication, where appro of relevant passages	oriate, Relevan	
A,D	US 5 951 193 A (K.K. HATTORI SEIN 14 September 1999 (1999-09-14) * claims; figures *	1,2,6,	9 A44C5/14 G04B37/14
A	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 01, 30 January 1998 (1998-01-30) -& JP 09 234104 A (CITIZEN WATCH 9 September 1997 (1997-09-09) * abstract; figures 1-8 *	1,2,6,4 CO LTD),	9
A	US 5 724 708 A (TEXTRON INC.) 10 March 1998 (1998-03-10) * column 3, line 1 - line 8; figu	1,2,6,9	9
A	EP 0 174 605 A (MONTRES RADO S.A. 19 March 1986 (1986-03-19) * abstract; figure 1 *	1,2,6,9	9
А	US 2 536 007 A (LITWIN & SONS INC 26 December 1950 (1950-12-26) * column 3, line 50 - column 4, figures 1,6 *		9 TECHNICAL FIELDS SEARCHED (Int.CI.7) A44C G04B
A	US 4 149 662 A (R. RAMACIERE) 17 April 1979 (1979-04-17)		
	The present search report has been drawn up for all c		
		ch 2003 C	examiner ourrier, G
X : part Y : part doc	icularly relevant if taken alone icularly relevant if combined with another Current of the same category L	: theory or principle underlying t : earlier patent document, but p after the filing date : document cited in the applicat : document cited for other reaso	ublished on, or ion ons

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

EP 00 30 3186

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19-03-2003

Patent document cited in search report			Publication date		Patent family member(s)		Publication date	
US	5951193	A	14-09-1999	JP JP CA CN ES GB HK IT	2838865 8224114 2169680 1137877 2130911 2297999 1014134 RM960111	A A1 A A1 A ,B A1	16-12-1998 03-09-1996 21-08-1996 18-12-1996 01-07-1999 21-08-1996 17-09-1999 19-08-1997	
JP	09234104	A	09-09-1997	NONE				
US	5724708	A	10-03-1998	CN EP	1183934 0853263	• •	10-06-1998 15-07-1998	
EP	174605	Α	19-03-1986	FR EP JP	2569957 0174605 61068003	A2	14-03-1986 19-03-1986 08-04-1986	
US	2536007	Α	26-12-1950	NONE				
us	4149662		17-04-1979	NONE				

FORM P0459

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