



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) Publication number:

0 347 250 A3

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: 89306145.7

(51) Int. Cl.⁵: **G04C 3/14, G04C 21/00**

(22) Date of filing: 16.06.89

(30) Priority: 17.06.88 JP 150862/88
17.06.88 JP 150873/88
14.07.88 JP 176040/88

(43) Date of publication of application:
20.12.89 Bulletin 89/51

(84) Designated Contracting States:
CH DE FR GB LI

(88) Date of deferred publication of the search report:
13.03.91 Bulletin 91/11

(71) Applicant: **SEIKO EPSON CORPORATION**
4-1, Nishishinjuku 2-chome
Shinjuku-ku Tokyo-to(JP)

(72) Inventor: **Kawaguchi, Takashi c/o Seiko Epson Corporation**

3-5, Owa 3-chome
Suwa-shi Nagano-ken(JP)
Inventor: **Yabe, Hiroshi c/o Seiko Epson Corporation**

3-5, Owa 3-chome
Suwa-shi Nagano-ken(JP)
Inventor: **Maruyama, Akihiko c/o Seiko Epson Corporation**

3-5, Owa 3-chome
Suwa-shi Nagano-ken(JP)
Inventor: **Yoshino, Masato c/o Seiko Epson Corporation**
3-5, Owa 3-chome
Suwa-shi Nagano-ken(JP)

(74) Representative: **Caro, William Egerton et al**
J. MILLER & CO. Lincoln House 296-302 High Holborn
London WC1V 7JH(GB)

(54) **Electronic alarm watch.**

(57) An electronic alarm watch has a step motor to drive current time indicating hour and minutes hands (12, 11). The watch also has another step motor to drive alarm hour and minute hands (39, 38). When a stem (23) is pulled to an alarm setting position, pressure on a switch operating button (26) causes the alarm hand step motor to drive the alarm hands (38, 39) to alarm set position indicating the time at which an alarm is to be rung. The alarm step motor ceases to drive the hands when the time is set and the pressure on the button (26) is released. When the time set by the alarm hands (38, 39) coincides with the current time displayed by the hands (11, 12), the alarm rings and the alarm step motor drives the alarm hands (38, 39) to indicate current time. It is readily perceivable from the hands (11, 12; 38, 39) whether the watch is set for alarm ringing or not.

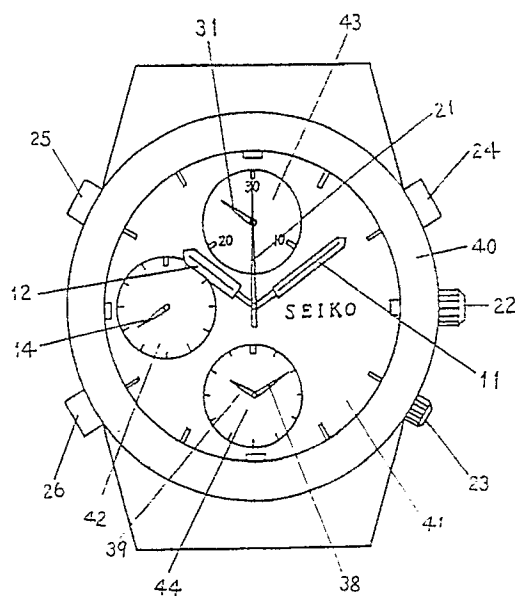


FIG 17

EP 0 347 250 A3



European
Patent Office

EUROPEAN SEARCH REPORT

Application Number

EP 89 30 6145

DOCUMENTS CONSIDERED TO BE RELEVANT					
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)		
A	EP-A-0 216 171 (CASIO COMPUTER CO., LTD) * Figure 2; claim 1 * - - -	1-4	G 04 C 3/14 G 04 C 21/00		
A	US-A-4 470 707 (CHAMBON et al.) * Abstract * - - -	1,2			
A	PATENT ABSTRACTS OF JAPAN, vol. 9, no. 157 (P-369)[1880], 2nd July 1985; & JP-A-60 33 081 (SEIKOUSHIYA K.K.) 20-02-1985 * Figure; abstract * - - -	4			
A	US-A-4 253 172 (NOMURA) * Column 1, line 26 - column 2, line 13; column 8, line 57 - column 9, line 18 * - - - - -	6			
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)		
			G 04 C G 04 F G 04 G		
The present search report has been drawn up for all claims					
Place of search The Hague		Date of completion of search 11 December 90	Examiner PEETERS M.M.G.		
<table border="0"><tr><td>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</td><td>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</td></tr></table>				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
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				