

Title (en)
ROLLER DISPLAY MECHANISM FOR A WATCH

Title (de)
WALZENANZEIGEMECHANISMUS FÜR ARMBANDUHR

Title (fr)
MÉCANISME D'AFFICHAGE À ROULEAU POUR MONTRE

Publication
EP 3267266 A1 20180110 (FR)

Application
EP 17175547 A 20170612

Priority
EP 16177872 A 20160705

Abstract (en)
[origin: JP2018004634A] PROBLEM TO BE SOLVED: To provide a display using rollers, with time indications legible despite a limited diameter of the rollers.SOLUTION: A timepiece display mechanism 100 comprises rollers 10, 11, 12, 13 and 14 pivoting about a main axis and comprising flaps 20, each pivoting about a secondary axis parallel to the main axis and having two faces. The display mechanism also comprises first drive means for pivoting the rollers 10, 11, 12, 13 and 14 about the main axis, and second drive means for pivoting a flap 20 about the secondary axis, in a predetermined position of the secondary axis relative to the main axis. At each flap 20, a drive pinion is included cooperating with control means to modify, sequentially or continuously, the position of the successive flaps 20 of the same rollers 10, 11, 12, 13 and 14 or to modify, on demand, the position of a specific flap 20.SELECTED DRAWING: Figure 1

Abstract (fr)
Mécanisme d'affichage (100) d'horlogerie, pour une montre (1000), comportant un rouleau (10, 11, 12, 13, 14) pivotant autour d'un axe principal (D10) et comportant des volets (20) chacun pivotant autour d'un axe secondaire (D20) parallèle à l'axe principal (D10) et comportant deux faces (201 ; 202), des premiers moyens d'entraînement (31) pour faire pivoter le rouleau (10, 11, 12, 13, 14) autour de l'axe principal (D10), et des deuxièmes moyens d'entraînement (32) pour faire pivoter un volet (20) autour de son axe secondaire (D20), dans une position déterminée de cet axe secondaire (D20) par rapport à l'axe principal (D10), et qui comportent, au niveau de chaque volet (20), un pignon d'entraînement (35) coopérant avec un moyen de commande pour modifier en séquence ou en continu la position des volets (20) successifs d'un même rouleau (10, 11, 12, 13, 14) ou pour modifier à la demande la position d'un volet (20) déterminé.

IPC 8 full level
G04B 19/20 (2006.01); **G04B 19/243** (2006.01)

CPC (source: CH CN EP US)
G04B 19/20 (2013.01 - EP US); **G04B 19/205** (2013.01 - CN EP US); **G04B 19/207** (2013.01 - EP US); **G04B 19/21** (2013.01 - CH US); **G04B 19/24386** (2013.01 - EP US); **G04B 19/24393** (2013.01 - US); **G04B 19/2573** (2013.01 - CN); **G09F 11/04** (2013.01 - US); **G09F 11/06** (2013.01 - US)

Citation (applicant)
US 3964428 A 19760622 - ARAI KIYOYUKI

Citation (search report)
• [A] US 3964428 A 19760622 - ARAI KIYOYUKI
• [A] CH 707103 A1 20140331 - JACOB & CO WATCHES INC [US]
• [A] US 2040421 A 19360512 - ALMQUIST FRANK G
• [A] FR 2220840 A1 19741004 - GEN ELECTRIC [US]

Cited by
EP3584642A1; CN115362415A; US11543778B2; EP4369112A1

Designated contracting state (EPC)
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 state (EPC)
BA ME

DOCDB simple family (publication)
EP 3267266 A1 20180110; **EP 3267266 B1 20200408**; CH 713873 A2 20181214; CH 713873 B1 20211230; CN 107577134 A 20180112; CN 107577134 B 20191101; CN 110579955 A 20191217; CN 110579955 B 20210827; CN 110579956 A 20191217; CN 110579956 B 20210402; CN 110647025 A 20200103; CN 110647025 B 20210723; EP 3627239 A1 20200325; EP 3627239 B1 20240417; EP 3627240 A1 20200325; EP 3627240 B1 20220601; EP 3627241 A1 20200325; EP 3627241 B1 20220216; HK 1248835 A1 20181019; JP 2018004634 A 20180111; JP 6405418 B2 20181017; US 10365610 B2 20190730; US 2018011444 A1 20180111

DOCDB simple family (application)
EP 17175547 A 20170612; CH 3852018 A 20180322; CN 201710541476 A 20170705; CN 201910949415 A 20170705; CN 201910953097 A 20170705; CN 201910953103 A 20170705; EP 19201623 A 20170612; EP 19201625 A 20170612; EP 19201627 A 20170612; HK 18108134 A 20180625; JP 2017124851 A 20170627; US 201715636031 A 20170628