

Title (en)

JUMPING TIMEPIECE DISPLAY MECHANISM WITH ROLLERS

Title (de)

ROLLENSPRUNG-UHRENANZEIGEMECHANISMUS

Title (fr)

MECANISME D'AFFICHAGE D'HORLOGERIE SAUTANT A ROULEAUX

Publication

EP 4220308 A3 20230809 (FR)

Application

EP 22209388 A 20201127

Priority

- EP 22209388 A 20201127
- EP 20210222 A 20201127

Abstract (en)

[origin: CN114563941A] A roller skipping timepiece display mechanism (100), each display device comprising a roller (1, 1A, 1B, 2, 3, 3A, 3B, 4) and/or a combined roller (10), comprising two rollers (1A, 1B, 3A, 3B), one of said two rollers (1A, 1B, 3A, 3B) being located inside the other, each display device being held in a rest position by a first elastic return means (311, 312, 313, 314, 316), at least one display device being rotatably movable, the rotation is controlled by the movement of at least one lever (11, 12, 13, 14, 15, 16), the lowering of which is controlled or prohibited by at least one cam (21, 22, 23, 24, 244, 245, 246, 247) driven by the timepiece movement (500), and at least one trigger lever or correction lever is arranged in bearing cooperation with both cams simultaneously, second resilient return means (119, 129, 139, 149, 159, 169) return the at least one trigger or correction lever towards the two cams.

Abstract (fr)

Mécanisme d'affichage d'horlogerie sautant à rouleaux (100), dont chaque afficheur comporte un rouleau (1, 1A, 1B, 2, 3, 3A, 3B, 4) et/ou un rouleau combiné (10) comportant deux rouleaux (1A, 1B, 3A, 3B) intérieurs l'un à l'autre, maintenu en position de repos par des premiers moyens de rappel élastique (311, 312, 313, 314, 316), au moins un afficheur est mobile en rotation commandée par le mouvement d'au moins une bascule (11, 12, 13, 14, 15, 16) dont la chute est commandée ou interdite par au moins une came (21, 22, 23, 24, 244, 245, 246, 247) entraînée par un mouvement (500), et au moins une bascule de déclenchement ou de correction (11, 12, 13, 14, 15, 16) est agencée pour coopérer simultanément en appui avec deux cames (21, 22, 23, 24, 244, 245, 246, 247) vers lesquelles elle est rappelée par des deuxièmes moyens de rappel élastique (119, 129, 139, 149, 159, 169).

IPC 8 full level

G04B 19/21 (2006.01); **G04B 19/257** (2006.01)

CPC (source: CN EP KR US)

G04B 19/21 (2013.01 - CN EP KR US); **G04B 19/22** (2013.01 - KR); **G04B 19/257** (2013.01 - EP US); **G04B 27/00** (2013.01 - KR);
G04B 27/005 (2013.01 - US); **G04B 13/02** (2013.01 - US)

Citation (search report)

- [XA] CH 705476 A2 20130315 - LACROIX-GACHET STEPHANE [CH]
- [A] CH 698748 B1 20091015 - PATEK PHILIPPE SA [CH]

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4006650 A1 20220601; CN 114563941 A 20220531; EP 4220308 A2 20230802; EP 4220308 A3 20230809; JP 2022085850 A 20220608;
JP 7241840 B2 20230317; KR 20220074720 A 20220603; US 11994829 B2 20240528; US 2022171339 A1 20220602

DOCDB simple family (application)

EP 20210222 A 20201127; CN 202111420947 A 20211126; EP 22209388 A 20201127; JP 2021164525 A 20211006;
KR 20210136011 A 20211013; US 202117448243 A 20210921