

Title (en)  
Extra-flat clockwork-movement

Title (de)  
Extraflaches Uhrwerk

Title (fr)  
Mouvement de montre extra-plat

Publication  
**EP 0573839 B1 19960424 (FR)**

Application  
**EP 93108400 A 19930525**

Priority  
CH 181892 A 19920606

Abstract (en)  
[origin: EP0573839A1] Extra-flat clockwork movement with manual or automatic winding, comprising at least one barrel (3) and all the runners of which are mounted cantilevered on a single bedplate (1) with the aid of a single ball-bearing (15 to 21). The ratchet (25) is in the form of a drum surrounding the barrel. It is pivoted by its periphery with the aid of at least three rollers each pivoted on a ball-bearing and the barrel (3) is pivoted in the ratchet by means of a ball-bearing (23). <??>This construction makes it possible to minimise energy losses due to friction. <IMAGE>

IPC 1-7  
**G04B 33/06**; **G04B 1/16**

IPC 8 full level  
**G04B 1/16** (2006.01); **G04B 31/00** (2006.01); **G04B 33/06** (2006.01); **G04B 35/00** (2006.01)

CPC (source: EP US)  
**G04B 1/16** (2013.01 - EP US); **G04B 33/06** (2013.01 - EP US)

Cited by  
EP3418594A1; WO2018234125A1; US7697376B2; US8498180B2; US8976629B2; EP1520214A2

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
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**EP 93108400 A 19930525**; CH 181892 A 19920606; DE 69302325 T 19930525; JP 16004293 A 19930607; US 6707093 A 19930526