

Title (en)
WATCH

Publication
EP 0360963 B1 19921125 (DE)

Application
EP 89106220 A 19890408

Priority
DE 3832514 A 19880924

Abstract (en)
[origin: JPH02116782A] PURPOSE: To reduce the number of parts by constituting an adjustment member with a time-zone ring that is rotated and adjusted from an engagement position that is concentrically arranged for a rotary axis to a next engagement position in steps. CONSTITUTION: An engagement gear 24 has an inclination surface 25 that is extended in both rotary directions symmetrically and is engaged in radius direction toward the inside of a gear groove 27 of a world time clock wheel 13 formed as a gear with 12 gears. The engagement gear 24 has a spring arm 26 that is supported by a time wheel disk 22 and the spring arm 26 slides along the gear surface of the gear groove when sliding the engagement gear 24 into the gear groove 27 and the engagement gear 24 contacts the both gear surfaces of the gear groove 27 and enters the center of the gear groove. The engagement gear 24 that is engaged into the gear groove is moved by the world time clock 13 and a drive device that is not shown here and the world time clock 13 is rotated relatively for an hour wheel 17. In that case, the engagement gear 24 is withdrawn from the gear groove and is engaged into an adjacent gear groove again, thus adjusting a world time hour gear 3 by one hour for an hour clock hand 2.

IPC 1-7
G04B 19/23

IPC 8 full level
G04B 19/23 (2006.01)

CPC (source: EP US)
G04B 19/235 (2013.01 - EP US)

Citation (examination)
• US 2305508 A 19421215 - WOODRUFF ALBERT N
• US 4634287 A 19870106 - VUILLEUMIER CYRIL [CH], et al
• US 3785141 A 19740115 - IKEGAMI T

Cited by
CN1035965C; CN112666818A; WO2013102598A2; US9395691B2; US9471037B2

Designated contracting state (EPC)
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