

Title (en)
ORBITAL MOVEMENT APPARATUS.

Title (de)
VORRICHTUNG ZUR ERZEUGUNG EINER UMLAUFBEWEGUNG.

Title (fr)
DISPOSITIF A MOUVEMENT ORBITAL.

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Application
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Abstract (en)
[origin: WO8201923A1] Orbital movement apparatus comprising first (3) and second (5) members, a shaft (7) journaled in the first member (3), and an eccentric (11) on the shaft having an axis (AX2) generally parallel to but radially offset a predetermined distance from the axis (AX1) of the shaft, the eccentric (11) being journaled in the second member (5). The members have opposing generally planar surfaces (15, 17) disposed generally parallel to and face-to-face with one another. At least three connections (19) between the members (3, 5) permit orbital movement while preventing rotational movement of the second member (5) with respect to the first member (3) upon relative rotation between the shaft (7) and the first member (3). Each connection (19) comprises a pair of opposing recesses (21) in the opposing planar surfaces (15, 17) of the members, the recesses (21) being concave, generally circular in shape and substantially identical in size with the central axis (AX3) of one recess (21) of each pair being substantially parallel to and offset from the central axis (AX4) of the other recess (21) of the pair by the aforesaid predetermined distance, and a ball (23) in each pair of recesses (21). The opposing recesses (21) of each pair have inwardly rounded peripheral walls providing circular races for the respective ball (23) whereby on relative rotation between the first member (3) and the shaft (7) the ball (23) rolls around the races, thereby permitting orbital movement while preventing rotational movement of the second member (5) with respect to the first member (3).

Abstract (fr)
Dispositif a mouvement orbital comprenant un premier (3) et un deuxieme (5) organes, un arbre (7) tourillonne dans le premier organe (3), et un excentrique (11) sur l'arbre possedant un axe (AX2) generalement parallele a l'axe (AX1) de l'arbre mais eloigne radialement d'une distance predeterminee de celui-ci, l'excentrique (1) etant tourillonne dans le deuxieme organe (5). Les organes possedent des surfaces planes generalement opposees (15, 17) disposees generalement parallelement et en face a face l'une par rapport a l'autre. Au moins trois connexions (19) entre les organes (3, 5) permettent un mouvement orbital tout en empechant un mouvement rotatif du deuxieme organe (5) par rapport au premier organe (3) lors de la rotation relative entre l'arbre (7) et le premier organe (3). Chaque connexion (19) comprend une paire de renforcements opposes (21) sur les surfaces planes opposees (15, 17) des organes, les renforcements (21) etant concaves, generalement de forme circulaire et de tailles sensiblement identiques, l'axe central (AX3) d'un renforcement (21) dans chaque paire etant sensiblement parallele a l'axe central (AX4) de l'autre renforcement (21) de la paire mais decale de cet axe d'une distance predeterminee, et une bille (23) est logee dans chaque paire de renforcements (21). Les renforcements opposes (21) de chaque paire possedent des parois peripheriques arrondies vers l'interieur formant des chemins circulaires pour les billes respectives (23), ce qui provoque, lors de la rotation relative entre le premier organe (3) et l'arbre (7), le roulement de la bille (23) le long des chemins circulaires, ce qui donne lieu a un mouvement orbital tout en empechant un mouvement rotatif du deuxieme organe (5) par rapport au premier organe (3).

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