

Title (en)
GEAR SYSTEM HAVING NESTED MODULES

Title (de)
GETRIEBE MIT HINTEREINANDER GESCHACHTELTEN MODULEN

Title (fr)
TRAIN D'ENGRENAGES A MODULES EMBOITES

Publication
EP 1415100 A1 20040506 (EN)

Application
EP 99935795 A 19990721

Priority
• US 9916521 W 19990721
• US 13643598 A 19980818

Abstract (en)
[origin: WO0011372A1] A gear system includes a plurality of gear modules (10) each having spring clips (14, 15, 16, 17) for performing a snap-fit attachment to another similarly configured gear module (110) and for providing gear coupling between the modules. Each module includes a housing (11) within which a plurality of planetary gears (41, 42, 43, 44) are rotatably supported about a common opening (45) and a gear rotor (30) received upon the planetary gears and having an internal ring gear (32) in engagement with the planetary gears. Each rotor of each module includes a forwardly extending center gear (31). Each housing of each gear module includes a plurality of spring clips (14, 15, 16, 17) having gripping edges (24, 25, 26, 27) for being received upon and snap-fit engaging the housing of the next succeeding gear module. The modules may be combined in virtually any practical number to obtain a desired gear ratio which is a multiple of the individual gear ratios of the modules.

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