

Title (en)
INTERNAL COMBUSTION ENGINE

Title (de)
BRENNKRAFTMASCHINE

Title (fr)
MOTEUR À COMBUSTION INTERNE

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Application
EP 16819016 A 20161208

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Abstract (en)
[origin: WO2017097936A1] The invention relates to an internal combustion engine comprising a cylinder (12), a piston (18) that is movably located within the cylinder (12), a crankshaft (14) and a connecting rod (22) that connects the piston (18) to a crank pin (30) of the crankshaft (14). Rotatably mounted within the connecting rod top end (26) of the connecting rod (22) is an eccentric sleeve (40), which rotatably holds the crank pin (30) and which, when necessary, can be locked in relation to the connecting rod (22) in at least two rotational orientations by means of a locking device (52). To achieve this, a locking element (56) of the locking device (52) can be moved into a locking hollow (70) of the connecting rod (22) or of the eccentric sleeve (40). According to the invention, the locking hollow (70) has greater dimensions, with respect to the circular path of the locking element (56) followed by said locking element relative to the component forming the locking hollow during a relative rotation of the eccentric sleeve (40) and the connecting rod (22), than those of the part of the locking element (56) designed to engage in the locking hollow (70). A relatively large locking hollow (70) of this type guarantees a secure engagement of the locking element (56), even at high relative angular speeds of the locking element (56) and the component forming the locking hollow (70), since the locking element (56) is not merely able to move in the locking hollow (70) in one definite rotational direction defined by an angle between the eccentric sleeve (40) and the connecting rod (22), but can be moved through a greater angular range, so that sufficient time is available for moving the locking element (56) into the locking hollow (70), even when there are relatively large differences in the angular speeds.

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