

Title (en)
RECIPROCATING ASSEMBLY FOR AN INTERNAL COMBUSTION ENGINE

Title (de)
KOLBENANORDNUNG FÜR EINE BRENNKRAFTMASCHINE

Title (fr)
ENSEMBLE À MOUVEMENT ALTERNATIF POUR MOTEUR À COMBUSTION INTERNE

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Abstract (en)
[origin: WO2021176466A1] A vehicle's fuel efficiency can be increased by reduce overall size and weight of the engine. A longer connecting rod results in higher block height which leads to larger engine height and thereby resulting into increased engine mass. The overall weight of the engine can be reduced by reducing length of connecting rod. Thus, for improving fuel economy, a combination of crank offset and reduced L/S ratio provides better results. This is achieved by providing a L/S ratio < 1.65, where L is length of the connecting rod and S is the stroke length. According to one embodiment of the present invention, a reduced connecting rod length results into fouling of piston and crank web, which is eliminated by providing relief in the piston skirt and the crank web along the profile of interference of piston skirt and the crank web.

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