

Title (en)
ONE-STROKE INTERNAL COMBUSTION ENGINE

Title (de)
EINTAKT-VERBRENNUNGSMOTOR

Title (fr)
MOTEUR À COMBUSTION INTERNE À UN TEMPS

Publication
EP 2999866 A1 20160330 (EN)

Application
EP 14801886 A 20140422

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Abstract (en)
[origin: WO2014189640A1] One-stroke internal combustion engines may comprise reciprocating pistons which are either straight or rotary. Three principles are required to make one -stroke engines work: create four dedicated chambers, assign the chambers with coordinated functions, and make pistons move in unison. The functions will be assigned only to a single stroke but an Otto cycle produces a repeating four stroke cycle. Since four functions are performed simultaneously during one stroke, every stroke becomes a power stroke, in reality, 1 -stroke engines are physically rearranged 4-stroke engines. Both straight and rotary I -stroke engines can be modified to comprise opposed piston opposed cylinder (OPOC) engines. The reciprocating piston output of I -stroke pistons may be converted to continuously rotating output by using crankshafts with split bushings or newly developed Crankgears with conventional bearings. A I -stroke engine may require only one crankshaft and thus nun' reduce the number of parts and increase the specific power ratio.

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