

Title (en)
PISTON WITH COOLING ARRANGEMENT

Title (de)
KOLBEN MIT ANORDNUNG ZUR KÜHLUNG

Title (fr)
PISTON AVEC DISPOSITIF DE REFROIDISSEMENT

Publication
EP 3301284 B1 20201125 (EN)

Application
EP 16191417 A 20160929

Priority
EP 16191417 A 20160929

Abstract (en)
[origin: EP3301284A1] A piston (1) for an engine (100) comprises a cooling arrangement that allows for an increased cooling efficiency of an outer peripheral wall (5) of a piston body (4) including a plurality of piston ring grooves (10, 12, 14). Lubricant is supplied to an outer plenum (22) formed adjacent to outer peripheral wall (5) via a cooling passage (26) that extends at an upwardly-inclined angle from a central plenum (28) towards the outer plenum (22). Lubricant that enters cooling passage (26) is imparted with a corresponding flow velocity component due to the upwardly-inclined orientation of cooling passage (26) prior to entering outer plenum (22) to flow along an inner surface of the same. A heat transfer between the lubricant and the inner surface of the outer plenum (22) is increased due to the resulting flow of lubricant.

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