

Title (en)
Engine braking devices and methods

Title (de)
Motorbremsvorrichtungen und -verfahren

Title (fr)
Dispositifs de freinage de moteur et procédés

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Abstract (en)

Apparatus and method for converting an internal combustion engine from a normal engine operation (20) to an engine braking operation (10). The engine includes exhaust valve train components comprising at least one exhaust valve (300) and at least one cam (230). The apparatus comprises actuation means (100) having at least one component integrated into at least one of the exhaust valve train components, such as a rocker arm (210) or a valve bridge (400). The actuation means (100) has an inoperative position and an operative position. In the inoperative position, the actuation means (100) is retracted and the small braking cam lobes (232 & 233) are skipped to generate a main valve lift profile (220m) for the normal engine operation (20). In the operative position, the actuation means (100) is extended so that the motion from all the cam lobes (220, 232 & 233) is transmitted to the at least one exhaust valve (300) for the engine braking operation (10).

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