

Title (en)
COMBUSTION SYSTEM FOR VEHICLE AND VEHICLE

Title (de)
VERBRENNUNGSSYSTEM FÜR EIN FAHRZEUG UND FAHRZEUG

Title (fr)
SYSTÈME DE COMBUSTION POUR VÉHICULE ET VÉHICULE

Publication
EP 4293209 A1 20231220 (EN)

Application
EP 21941040 A 20210508

Priority
CN 2021092307 W 20210508

Abstract (en)
A combustion system (100) and a vehicle. The combustion system (100) may comprise an air intake passage (10), an air exhaust passage (20), an air intake valve (30), and an air exhaust valve (40). The included angle between an axis of the air intake valve (30) and an axis of the air exhaust valve (40) is a preset angle. Furthermore, when the air intake valve (30) shuts down the air intake passage (10) and the air exhaust valve (40) shuts down the air exhaust passage (20), the center position of the air intake valve (30) is higher than the center position of the air exhaust valve (40). The combustion system (100) fixes the included angle between the axis of the air intake valve (30) and the axis of the air exhaust valve (40). Furthermore, the height of the center position of the air intake valve (30) is designed to be higher than the height of the center position of the air exhaust valve (40). Therefore, airflow at the upper part of the air intake valve (30) flows along the inner wall of a combustion chamber (50) and a wall surface of the air exhaust valve (40) to enter the combustion chamber (50). A flow rate dead zone near the air exhaust valve (40) is reduced, thereby achieving high tumble flow conditions of gas in the combustion chamber (50). The combustion speed of the gas in the combustion system (100) of an engine is increased, the engine efficiency is increased, and requirements for engine power are met.

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