

Title (en)
MULTIPLE CONCENTRIC INTAKE/EXHAUST VALVE SYSTEM FOR AN INTERNAL COMBUSTION ENGINE

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Application
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Abstract (en)
[origin: WO8301485A1] An intake and exhaust valve system deployed in an internal combustion engine that improves available charge flow through the engine, provides improved charge turbulence and swirl of charge during each intake stroke for better mixture, provides for multiple independent fuel mixing at the cylinder (12), allows the use of concentric intake and exhaust valves (22, 24) also providing for balanced charge entry exit symmetry. The intake and exhaust valve system includes using a plurality of two or more concentric valve assemblies per cylinder, each intake valve (22) being mounted within a hollow exhaust valve (24), the multiple intake and exhaust valve (22, 24) providing optimum, flow area entering and exiting the cylinder (12). Two or more charge passage openings (14) per cylinder strategically disposed enhances the uniform distribution of charge per unit time. Utilization of the present invention greatly increases the fuel efficiency of the engine, reduces emission pollution without sacrificing engine horsepower.

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