

[54] EMISSIONS CONTROL SYSTEM

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[22] Filed: Aug. 19, 1971

[21] Appl. No.: 173,068

Related U.S. Application Data

[63] Continuation of Ser. No. 746,644, July 22, 1968, abandoned.

[52] U.S. Cl.123/75 E, 64/25, 123/90.15

[51] Int. Cl.F01I 1/34, F02d 39/02

[58] Field of Search.....123/90.15-90.18, 123/75 R, 75 E, 97 R, 97 B, 107, 119 A; 64/25

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[57] ABSTRACT

A method, system and apparatus for minimizing the amounts of undesirable pollutants emitted from an internal combustion engine after combustion of a fuel-air mixture within a cylinder of said engine in which a portion of the products of combustion of a given operating cycle, which portion contains a higher proportion of noxious constituents than does the expelled portion of such products, is retained in the cylinder and is mixed with the incoming charge for the next operating cycle. One particular form of the invention comprises varying the proportion of such retained products according to engine operating conditions in order to maintain the dilution of such incoming charge at the maximum level consistent with good engine performance. The retained products are in an amount in excess of that normally retained in the cylinder clearance volume at the exhaust manifold pressure.

14 Claims, 9 Drawing Figures



