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Fuel metering system for an internal combustion engine.

The fuel metering system uses a digital computer to calculate the desired fuel flow to maintain an air/fuel ratio required under the engine operating conditions existing at the time. This desired fuel flow is obtained from a basic fuel metering system and, under equilibrium engine operating conditions, is the actual fuel flow demand of the engine. Under transient engine operating conditions, the invention provides compensation of the basic fuel metering system calculations to take into account the effects of the transfer of fuel from the liquid state on the wall surfaces of the engine's intake passages to the gas or vapor state in the inducted air/fuel mixture and also takes into account transfers of fuel from the inducted air/fuel mixture onto the intake passage surfaces as a liquid deposit.



DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	<u>US - A - 3 628 510</u> (MOULDS et al.) * Column 1, line 10 to column 2, line 5; column 2, line 25 to column 3, line 22; column 3, line 74 to column 11, line 45; figures 1-4 *	1,2,4 6,7	F 02 D 5/00
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	<u>US - A - 3 986 006</u> (KAWAI et al.) * Figures 1,8; column 1, lines 8-24, 38-50; column 2, line 16 to column 11, line 67 *	3,4,6	TECHNICAL FIELDS SEARCHED (Int. Cl. ³)
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D	<u>US - A - 4 086 884</u> (MOON et al.) * Figure 1; columns 1-5 *	3-6	F 02 D
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	<u>US - A - 4 148 282</u> (GRASSLE et al.) * Figures 1,3,4; column 1, line 10 to column 6, line 64 *	1,4,6	
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	<u>GB - A - 1 164 747</u> (BOSCH) * Whole patent *	1,4,6	CATEGORY OF CITED DOCUMENTS
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	<u>US - A - 3 982 519</u> (MOON) * Whole patent *	1,4,6	X: particularly relevant A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention E: conflicting application D: document cited in the application L: citation for other reasons

	The present search report has been drawn up for all claims		&: member of the same patent family, corresponding document
Place of search The Hague		Date of completion of the search 30-10-1981	Examiner LAPEYRONNIE