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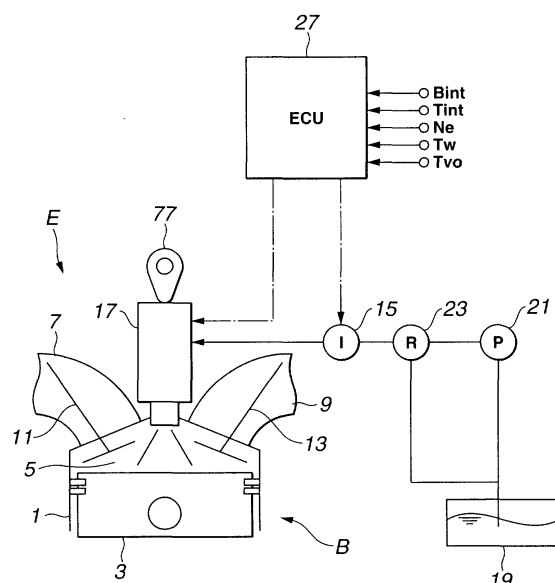
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(54) **Compression self-ignition internal combustion engine and fuel supply device therefor**

(57) A compression self-ignition internal combustion engine in which combustion of air-fuel mixture in a combustion chamber is made upon self-ignition of the air-fuel mixture under compression by a piston. A high temperature air-fuel mixture field is formed in the combustion chamber, and has a fuel concentration which causes no self-ignition within the combustion chamber. A mixture charge injector is disposed to supply to the air-fuel mixture field a mixture charge which has a fuel concentration higher than that in the air-fuel mixture field and contains fuel and a fluid containing air, at least a part of the fuel being vaporized.

**FIG.1**





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EP 01 11 7479

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Place of search THE HAGUE		Date of completion of the search 4 February 2003	Examiner Wassenaar, G
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<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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