

12

**EUROPEAN PATENT APPLICATION**

21 Application number: **83110423.7**

51 Int. Cl.<sup>3</sup>: **F 02 D 5/02**

22 Date of filing: **19.10.83**

30 Priority: **20.10.82 JP 182903/82**

71 Applicant: **HITACHI, LTD., 6, Kanda Surugadai 4-chome Chiyoda-ku, Tokyo 100 (JP)**

43 Date of publication of application: **25.04.84 Bulletin 84/17**

72 Inventor: **Kashiwaya, Mineo, 2920, Mawatari, Katsuta-shi (JP)**  
 Inventor: **Morita, Kiyomi, 1181-100, Higashiishikawa, Katsuta-shi (JP)**  
 Inventor: **Sakamoto, Masahide, 1034, Higashiishikawa-2-chome, Katsuta-shi (JP)**

84 Designated Contracting States: **DE FR GB IT SE**

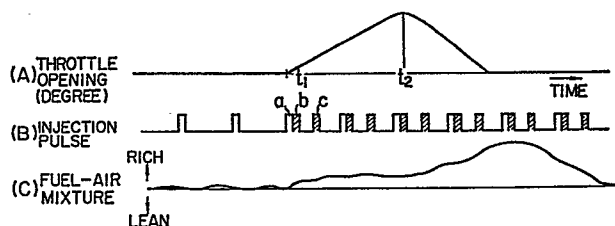
88 Date of deferred publication of search report: **19.12.84 Bulletin 84/51**

74 Representative: **Patentanwälte Beetz sen. - Beetz jun. Timpe - Siegfried - Schmitt-Fumlan, Steinsdorfstrasse 10, D-8000 München 22 (DE)**

54 **Fuel injection control apparatus for internal combustion engine.**

57 A fuel injection control apparatus for an internal combustion engine for supplying an additional amount of fuel in addition to a basic amount of fuel when an acceleration condition is detected in accordance with a throttle opening change rate.

The apparatus stops the injection of the additional amount of fuel when a deceleration state is detected in a state where both of the basic and additional amount of fuel are injected.



**EP 0 106 365 A3**



| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                     |                                                                                                                                                          |                                                                                                                                                                                                                                                                              |                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| Category                                                                                                                                                                                                                | Citation of document with indication, where appropriate, of relevant passages                                                                            | Relevant to claim                                                                                                                                                                                                                                                            | CLASSIFICATION OF THE APPLICATION (Int. Cl. <sup>3</sup> )   |
| Y                                                                                                                                                                                                                       | FR-A-2 066 344 (NISSAN MOTOR CO.)<br>* page 1, line 31 - page 2, line 33; page 7, line 23 - page 8, line 27; page 11, lines 4-13 *                       | 1,2                                                                                                                                                                                                                                                                          | F 02 D 5/02                                                  |
| Y                                                                                                                                                                                                                       | ---<br>US-A-4 184 458 (AOKI et al.)<br>* column 1, line 45 - column 2, line 24; column 8, line 3 - column 9, line 48 *                                   | 1,2                                                                                                                                                                                                                                                                          |                                                              |
| A,P                                                                                                                                                                                                                     | ---<br>PATENTS ABSTRACTS OF JAPAN, vol. 6, no. 263 (M-181)[1141], 22nd December 1982; & JP - A - 57 157 029 (HONDA GIKEN KOGYO K.K.) 28-09-1982 (Cat. A) | 1,2                                                                                                                                                                                                                                                                          |                                                              |
| A                                                                                                                                                                                                                       | ---<br>US-A-4 305 365 (NISSAN MOTOR CO.)<br>* figure 1; column 2, lines 20-24 *                                                                          | 3,4                                                                                                                                                                                                                                                                          | TECHNICAL FIELDS SEARCHED (Int. Cl. <sup>3</sup> )<br>F 02 D |
| -----                                                                                                                                                                                                                   |                                                                                                                                                          |                                                                                                                                                                                                                                                                              |                                                              |
| The present search report has been drawn up for all claims                                                                                                                                                              |                                                                                                                                                          |                                                                                                                                                                                                                                                                              |                                                              |
| Place of search<br>THE HAGUE                                                                                                                                                                                            |                                                                                                                                                          | Date of completion of the search<br>18-09-1984                                                                                                                                                                                                                               | Examiner<br>MOUALED R.                                       |
| <b>CATEGORY OF CITED DOCUMENTS</b>                                                                                                                                                                                      |                                                                                                                                                          |                                                                                                                                                                                                                                                                              |                                                              |
| X : particularly relevant if taken alone<br>Y : particularly relevant if combined with another document of the same category<br>A : technological background<br>O : non-written disclosure<br>P : intermediate document |                                                                                                                                                          | T : theory or principle underlying the invention<br>E : earlier patent document, but published on, or after the filing date<br>D : document cited in the application<br>L : document cited for other reasons<br>& : member of the same patent family, corresponding document |                                                              |

