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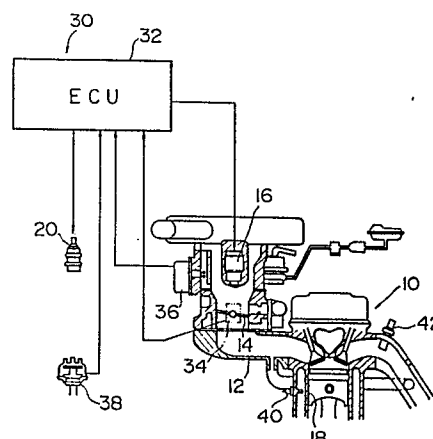
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## **54 Engine control system.**

57 An engine controlling system has an electrical control unit (32) operative during an engine deceleration to deenergize an electrically actuated fuel injector (16) to interrupt fuel supply to the engine when a throttle valve (14) is in closed idle position and the engine speed is above a first predetermined r.p.m. level. When it is detected by the control unit (32) that the throttle valve (14) is still in the idle position and the engine speed has been lowered to a second predetermined r.p.m. level lower than the first predetermined level, the control unit operates to resume the fuel supply at a rate increased compared with engine intake air flow rate and engine speed both detected at this time, and, simultaneously, retard the ignition timing whereby the engine speed smoothly and gradually varies after the resumption of fuel supply.

**FIG. 1**





| 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.4) |
| Y   | GB-A-2 033 615 (HITACHI LTD)<br>* Page 1, lines 43-111; page 2, line 123 - page 4, line 109 *                   | 1  | F 02 D 37/02<br>F 02 D 41/12                  |
| Y   | ---<br>US-A-4 452 212 (TAKASE)<br>* Figures 1,5; column 2, line 26 - column 6, line 2 *                         | 1  |   |
| A   | ---<br>GB-A-2 060 063 (NISSAN MOTOR CO.)<br>* Abstract; page 1, lines 33-70 *                                   | 1  |   |
| A   | ---<br>EP-A-0 055 482 (HITACHI LTD)<br>* Page 6, line 18 - page 8, line 4; page 16, line 23 - page 17, line 7 * | 1  |   |
|   |   |  | -----   |
|   |   |  | TECHNICAL FIELDS SEARCHED (Int. Cl.4)         |
|   |   |  | F 02 D<br>F 02 P                              |
| The present search report has been drawn up for all claims  |   |  |   |
| Place of search<br>THE HAGUE  |   | Date of completion of the search<br>29-07-1987   | Examiner<br>MOUALED R.                        |
| CATEGORY OF CITED DOCUMENTS   |   |  |   |
| 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 |   |