



(11) **EP 2 541 028 A8**

(12) **CORRECTED EUROPEAN PATENT APPLICATION**  
published in accordance with Art. 153(4) EPC

(15) Correction information:  
**Corrected version no 1 (W1 A1)**  
**Corrections, see**  
**Bibliography INID code(s) 71, 72**

(51) Int Cl.:  
**F02D 45/00 (2006.01)**

(86) International application number:  
**PCT/JP2010/052967**

(48) Corrigendum issued on:  
**17.04.2013 Bulletin 2013/16**

(87) International publication number:  
**WO 2011/104844 (01.09.2011 Gazette 2011/35)**

(43) Date of publication:  
**02.01.2013 Bulletin 2013/01**

(21) Application number: **10846509.7**

(22) Date of filing: **25.02.2010**

(84) Designated Contracting States:  
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR  
HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL  
PT RO SE SI SK SM TR**

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(54) **CONTROL DEVICE OF INTERNAL COMBUSTION ENGINE**

(57) A control apparatus is provided for an internal combustion engine, which is capable of appropriately incorporating various types of requirements concerned with performance of the internal combustion engine, in particular, a requirement concerned with a time-integrated value of a control amount rather than an instantaneous value of the control amount in a target value of the control amount, and does not require that such requirements be expressed in a form of a requirement value of the control amount.

A control apparatus for an internal combustion engine is provided, in which various types of requirements

concerned with performance of the internal combustion engine are acquired and a restricting range of values of a control amount is set according to a specific detail of each requirement. At this time, the set restricting range is varied with time for specific requirements concerned with a time-integrated value of the control amount rather than an instantaneous value of the control amount. Next, the control apparatus determines a final restricting range based on overlaps between restricting ranges set for the requirements and determines a target value of the control amount, which falls within the final restricting range.

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Fig.2

