

Title (en)  
Load control apparatus.

Title (de)  
Lastverstelleinrichtung.

Title (fr)  
Dispositif de réglage de charge.

Publication  
**EP 0402521 B1 19940119 (DE)**

Application  
**EP 89119153 A 19891016**

Priority  
DE 3919093 A 19890610

Abstract (en)  
[origin: EP0402521A1] A load control device is proposed with a throttle valve determining the output of an internal combustion engine, this valve being rotationally-fixedly connected to a throttle valve shaft (32) supported in a throttle valve housing (30). This shaft has a mechanical articulated side (33) on the accelerator pedal side and a servo-motor-controlled articulated side (34) to which a coupling element (45) is assigned for mechanical isolation of the throttle valve shaft from the servo motor in a defined angular range of the throttle valve, whilst a device is provided for feedback of the relevant position of the coupling element to an electronic regulating device. In order to facilitate a constructionally simple feedback of the position of the electric servomotor to the articulated side on the accelerator pedal side in the case of a two-sided throttle-valve control of this type, the throttle valve shaft is designed as a tube and the feedback device has a through-shaft (48), which runs through the throttle valve shaft, a first transmission element (49) rotationally-fixedly connected to the through-shaft and the coupling element on the servo-motor-controlled articulated side and a second transmission element (50) rotationally-fixedly connected to the through-shaft on the articulated side on the accelerator pedal side, this element (50) acting in concert with an actual value detection device (18) assigned to the regulating device. <IMAGE>

IPC 1-7  
**F02D 11/10; F02D 41/14**

IPC 8 full level  
**F02D 9/00** (2006.01); **F02D 9/02** (2006.01); **F02D 11/10** (2006.01); **F02D 41/14** (2006.01)

CPC (source: EP US)  
**F02D 11/10** (2013.01 - EP US); **F02D 2011/103** (2013.01 - EP US)

Cited by  
EP0494336B1

Designated contracting state (EPC)  
DE ES FR GB IT SE

DOCDB simple family (publication)  
**EP 0402521 A1 19901219; EP 0402521 B1 19940119**; DE 3919093 A1 19901213; DE 58906778 D1 19940303; ES 2049791 T3 19940501;  
JP H0331530 A 19910212; JP H06102995 B2 19941214; US 5027766 A 19910702

DOCDB simple family (application)  
**EP 89119153 A 19891016**; DE 3919093 A 19890610; DE 58906778 T 19891016; ES 89119153 T 19891016; JP 14886190 A 19900608;  
US 53101590 A 19900531