

Title (en)
STARTER SYSTEMS FOR AN INTERNAL COMBUSTION ENGINE AND METHODS FOR STARTING AN INTERNAL COMBUSTION ENGINE

Title (de)
STARTERSYSTEME FÜR EINEN VERBRENNUNGSMOTOR SOWIE VERFAHREN ZUM START EINES VERBRENNUNGSMOTORS

Title (fr)
SYSTEMES DE DEMARRAGE POUR MOTEUR A COMBUSTION INTERNE ET PROCEDE DE DEMARRAGE CORRESPONDANT

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Application
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Abstract (en)
[origin: US6202615B1] Methods and apparatus for starting an internal combustion engine are disclosed. One of the disclosed apparatus includes an electric starter operatively coupled to the internal combustion engine and an energy storage device for supplying the starter with power. The apparatus is also provided with a sensor for detecting a temperature of the internal combustion engine and a consumer control device associated with a consumer of electrical power. The apparatus is further provided with a power flow controller which controls the consumer control device such that a portion of the energy stored in the energy storage device is delivered to the consumer of electrical power before the electric starter is supplied with power. The portion of the energy has a size which is dependent upon the sensed temperature. The size of the portion is smaller at low temperatures than at high temperatures. In some embodiments, the power flow controller uses the sensed temperature to supplement the energy drawn from the short-term accumulator with energy from the long-term accumulator to ensure the starter is provided with sufficient energy to start the internal combustion engine.

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