

Title (en)

Electromechanical high load separation device

Title (de)

Elektromechanische, hochbelastete Trennvorrichtung

Title (fr)

Dispositif de séparation électromécanique pour fortes charges

Publication

EP 1104045 A2 20010530 (EN)

Application

EP 00310387 A 20001123

Priority

US 44820399 A 19991123

Abstract (en)

An electromechanical high load separation device for providing a reliable means of separation for high-load, mission-critical applications, e.g., deployment of solar panels and high-gain antennas on a satellite. The load separation device provides a structural support for a bolted joint that can be remotely separated by transmitting an electrical signal without the use of explosive initiators. When a separation or deployment is desired, a power supply is remotely triggered to transmit an electrical signal to the separation device. This signal will energize both or either one of the two spools, which would cause them to separate. This in turn allows spring-loaded plungers to drive through the spools, resulting in mechanical actuation. The actuation will physically release a threaded rod and its attachment, completing its function. <IMAGE>

IPC 1-7

H01Q 1/08; **H01Q 1/12**; **H01Q 1/28**

IPC 8 full level

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CPC (source: EP)

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