Title (en)

SYSTEMS AND METHODS FOR FUEL CARTRIDGE DISTRIBUTION

Title (de)

SYSTEME UND VERFAHREN ZUR BRENNSTOFFKASSETTENVERTEILUNG

Title (fr)

SYSTEMES ET PROCEDES POUR LA DISTRIBUTION DE CARTOUCHES DE COMBUSTIBLE

Publication

EP 1839356 A2 20071003 (EN)

Application

EP 05857179 A 20051221

Priority

- US 2005046578 W 20051221
- US 63842104 P 20041221
- US 67742405 P 20050502
- US 68259805 P 20050518

Abstract (en)

[origin: WO2006069237A2] The invention relates to systems and methods that improve distribution of fuel cartridges. The cartridges include compatibility information. A controller on the device validates the compatibility information before permitting fuel provision from the cartridge to the device. Invalid compatibility information, or absence of the compatibility information, then denies fuel flow to the device. This permits the device to validate that the cartridge and its contents are acceptable. This improves distribution by allowing the device or fuel cell manufacturer to implement cartridge selectivity by permitting cartridges from select manufacturers to provide fuel and denying cartridge of other manufacturers from providing fuel. Compatibility information stored in the cartridge memory may also be encrypted to prevent open access to the compatibility information. The compatibility information also improves fuel refilling distribution. In this case, the compatibility information permits a cartridge or device manufacturer to selectively control who can refill their cartridges.

IPC 8 full level (invention and additional information)

F17C 13/02 (2006.01); **B67D 7/24** (2010.01); **F17C 11/00** (2006.01); **G06F 17/50** (2006.01); **G07F 15/00** (2006.01); **G07G 1/14** (2006.01); **H01M 8/04** (2006.01)

CPC (invention and additional information)

H01M 8/04208 (2013.01); **H01M 8/04082** (2013.01); **H01M 8/04186** (2013.01); H01M 8/1011 (2013.01); Y02E 60/523 (2013.01); Y02P 70/56 (2015.11)

Citation (search report)

See references of WO 2006069237A3

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

EPO simple patent family

WO 2006069237 A2 20060629; WO 2006069237 A3 20090416; EP 1839356 A2 20071003

INPADOC legal status

2012-01-18 [18D] APPLICATION DEEMED TO BE WITHDRAWN
- Effective date : 20110726

2009-05-27 [RIC1] CLASSIFICATION (CORRECTION)
- IPC : F17C 13/02 20060101AFI20090421BHEP

2009-05-27 [RIC1] CLASSIFICATION (CORRECTION)
- IPC : F17C 11/00 20060101ALI20090421BHEP

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- IPC : B67D 5/24 20060101ALI20090421BHEP

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- IPC : G06F 17/50 20060101ALI20090421BHEP

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- IPC : H01M 8/04 20060101ALI20090421BHEP

2009-05-27 [RIC1] CLASSIFICATION (CORRECTION)
- IPC : G07F 15/00 20060101ALI20090421BHEP

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2009-05-20 [R17D] SEARCH REPORT (CORRECTION)
- Effective date : 20090416

2008-03-26 [DAX] REQUEST FOR EXTENSION OF THE EUROPEAN PATENT (TO ANY COUNTRY) (DELETED)

2007-10-03 [17P] REQUEST FOR EXAMINATION FILED

- Effective date : 20070720

2007-10-03 [AK] DESIGNATED CONTRACTING STATES:
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- Designated State(s) : AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

2007-10-03 [AX] REQUEST FOR EXTENSION OF THE EUROPEAN PATENT TO:
- Countries : AL BA HR MK YU