

Title (en)

Control of detonative cleaning apparatus

Title (de)

Steuerung einer Vorrichtung zur Reinigung durch Detonation

Title (fr)

Contrôle d'un appareil de nettoyage à détonation

Publication

EP 1533048 B1 20080604 (EN)

Application

EP 04257175 A 20041119

Priority

- US 71873003 A 20031120
- US 80121504 A 20040315

Abstract (en)

[origin: EP1533048A1] A shockwave cleaning apparatus cleans one or more surfaces within a vessel A sensor (206, 208) senses one or more thermodynamic properties associated with the vessel (200). A control system (214) is coupled to an initiator and a fuel/oxidizer source to control the firing of the apparatus responsive to input from the sensor (206, 208). <IMAGE>

IPC 8 full level

B08B 7/00 (2006.01); **B08B 9/08** (2006.01); **F23J 3/00** (2006.01); **F27D 19/00** (2006.01); **F27D 21/00** (2006.01); **F27D 25/00** (2010.01); **F28G 7/00** (2006.01); **F28G 13/00** (2006.01); **F28G 15/00** (2006.01); **F28G 15/02** (2006.01)

CPC (source: EP)

B08B 7/0007 (2013.01); **B08B 9/08** (2013.01); **F27D 19/00** (2013.01); **F27D 21/0014** (2013.01); **F27D 25/006** (2013.01); **F28G 7/00** (2013.01); **F28G 7/005** (2013.01); **F28G 15/00** (2013.01); **F28G 15/02** (2013.01)

Cited by

CN102297635A; US8651066B2

Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 1533048 A1 20050525; **EP 1533048 B1 20080604**; AT E397498 T1 20080615; AU 2004229043 A1 20050609; AU 2004229043 B2 20070426; CN 1623690 A 20050608; DE 602004014232 D1 20080717; ES 2309469 T3 20081216; JP 2005188918 A 20050714; JP 3993596 B2 20071017; NZ 536700 A 20070126; PL 1533048 T3 20090227; RU 2004133923 A 20060510; RU 2285567 C2 20061020

DOCDB simple family (application)

EP 04257175 A 20041119; AT 04257175 T 20041119; AU 2004229043 A 20041112; CN 200410095204 A 20041122; DE 602004014232 T 20041119; ES 04257175 T 20041119; JP 2004332554 A 20041117; NZ 53670004 A 20041119; PL 04257175 T 20041119; RU 2004133923 A 20041122