

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 A1 20050525 (EN)

Application

EP 04257175 A 20041119

Priority

- US 71873003 A 20031120
- US 80121504 A 20040315

Abstract (en)

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 1-7

B08B 7/00; **B08B 9/08**; **F28G 13/00**; **F27D 23/02**

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)

Citation (search report)

- [XA] WO 0178912 A1 20011025 - NIRANIA KY [FI], et al
- [A] WO 02084193 A1 20021024 - BANG & CLEAN GMBH [CH], et al
- [A] US 5082502 A 19920121 - LEE KAM B [US], et al

Cited by

CN102297635A; US8651066B2

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