

Title (en)

Method and apparatus for plasma pyrolysis of liquid waste.

Title (de)

Verfahren und Vorrichtung zur Plasmapyrolyse von flüssigen Abfällen.

Title (fr)

Procédé et dispositif pour la pyrolyse à plasma de déchets liquides.

Publication

EP 0354731 A1 19900214 (EN)

Application

EP 89307930 A 19890803

Priority

US 22988488 A 19880810

Abstract (en)

A method and apparatus for pyrolytically decomposing waste material characterized by injecting a mixture of waste and water into a plasma torch having an operating temperature of in excess of 5000 DEG C to form a mixture of product gases and solid particulate; separating the gases and particulate in a first cyclone separator into separate phases; transferring the particulate to a second cyclone separator and subjecting the particulate to a partial vacuum to separate any carryover gases from the particulate; subjecting the combined reaction chamber and carryover gases in a scrubber to a spray consisting of a caustic solution and water to eliminate any carryover particulate from the gases and to neutralize any HCl in the gases; and removing the gases from the scrubber.

IPC 1-7

C10B 19/00; **C10B 53/00**

IPC 8 full level

B09B 3/00 (2006.01); **C10B 19/00** (2006.01); **C10B 53/00** (2006.01)

CPC (source: EP)

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Citation (search report)

- [AD] US 4644877 A 19870224 - BARTON THOMAS G [CA], et al
- [A] GB 2113815 A 19830810 - SKF STEEL ENG AB
- [A] WO 8200509 A1 19820218 - FAELDT I, et al
- [A] US 3828162 A 19740806 - HOLDEN C

Cited by

DE4231771A1; GB2490175A; US5793013A; US5973289A; US5498826A; AU669158B2; US5206879A; CN109737430A; US6187206B1; US9744575B2; WO9722556A1; WO9317759A1; WO9641505A1; WO9113532A1

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