

Title (en)

METHOD AND SYSTEM FOR SOLID PARTICLE REMOVAL

Title (de)

VERFAHREN UND SYSTEM ZUR ENTFERNUNG VON FESTEN TEILCHEN

Title (fr)

PROCÉDÉ ET SYSTÈME D'ELIMINATION DE PARTICULE SOLIDE LIBRES SOLIDES

Publication

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Application

EP 18741127 A 20180117

Priority

- US 201762447749 P 20170118
- US 2018014106 W 20180117

Abstract (en)

[origin: CN110769915A] The present invention relates to a system and method to separate solid particle components from a fluid. The invention uses a novel combination of mechanical filtration, solids decantation and real and imaginary forces. The invention comprises a spherical vessel with a tangential inlet to introduce the fluid and a fluid exhaust and filter arranged on the center line of the interior of the vessel. A combination of pressurized fluid and solid particles enter the invention at the tangential inlet and will move primarily in a circular path around the interior of the vessel. The path of the fluid and solid particles mixture in a circular path will cause the larger mass particles to settle at the vessels lower region. Less massive particles may be entrained in the exiting fluid flow toward a filter element where they are removed from the exiting fluid.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- [X] US 4908049 A 19900313 - YOSHIDA YASUNOBU [JP], et al
- [A] DE 851483 C 19521006 - HOFFMANN EDWIN DR-ING
- [A] WO 2015188850 A1 20151217 - ABB SPA [IT]
- [A] US 2016375386 A1 20161229 - MAGNUS ANDREW K [CA], et al
- See references of WO 2018136557A1

Designated contracting state (EPC)

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