

Title (en)  
FLUID FLOW INLET

Title (de)  
ZULAUFVORRICHTUNG FÜR FLÜSSIGKEITEN

Title (fr)  
ORIFICE D'ADMISSION POUR ECOULEMENT FLUIDE

Publication  
**EP 1062017 A1 20001227 (EN)**

Application  
**EP 99908567 A 19990301**

Priority  
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• US 3777098 A 19980310

Abstract (en)  
[origin: WO9946027A1] Method and apparatus are described for preventing particulate material from adhering to an inner surface of an inlet (10). A porous wall section (20) and external chamber (25) are adapted to receive a supply (26, 27) of inert gas to form a film (30) of inert gas along an inner surface (22) of a proximal inlet end (15) of the inlet (10). The film (30) of inert gas prevents particulate material from adhering to the proximal inlet end (15) of the inlet. A circumferential reservoir (40) and weir (41) is adapted to receive an injection of fluid in a tangential direction (42) to provide a wall (45) of swirling fluid along an inner surface (37) of a distal exit end (35) of the inlet (10). The wall (45) of swirling fluid prevents particulate material from adhering to the distal exit end (35) of the inlet (10). A solid cone (50) of fluid is formed as the wall (45) of swirling fluid exits the inlet (10). The solid cone (50) of fluid reacts with the particulate material diffusing through the solid cone (50) of fluid, and keeps stray moisture from diffusing back up the inlet (10).

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