

Title (en)  
TANK-CLEANING DEVICE

Title (de)  
TANKREINIGUNGSVORRICHTUNG

Title (fr)  
DISPOSITIF DE NETTOYAGE DE RESERVOIR

Publication  
**EP 1062049 A1 20001227 (DE)**

Application  
**EP 99910236 A 19990218**

Priority  
• DE 19811421 A 19980317  
• EP 9901063 W 19990218

Abstract (en)  
[origin: DE19811421A1] The cleaning device has a housing that is inserted in the tank opening and having a fluid supply pipe and a nozzle holder (4) with four nozzles (8,9,10,11). Each pair of nozzles are set V-fashion at an acute angle (12) to each other with the two V-formations (13,14) pointing in opposite directions (15). The rotation of the nozzle holder about its first rotary axis and the nozzle assembly (6) about the second rotary axis (7) are mechanically linked at a fixed ratio to ensure repeat spray patterns.

IPC 1-7  
**B05B 3/04**; **B08B 9/093**

IPC 8 full level  
**B05B 3/04** (2006.01); **B08B 9/093** (2006.01)

CPC (source: EP US)  
**B05B 3/0445** (2013.01 - EP US); **B08B 9/0936** (2013.01 - EP US)

Citation (search report)  
See references of WO 9947271A1

Cited by  
DE202005021573U1; DE102006034882B3; DE102004052794B3; DE102005038193A1; DE102005038194B3; DE102005038193B4; EP1882914A2; DE202005021574U1; WO2006048067A1; EP2620226A1

Designated contracting state (EPC)  
DE DK FR GB IT SE

DOCDB simple family (publication)  
**DE 19811421 A1 19990923**; **DE 19811421 C2 20010913**; DE 59909241 D1 20040527; DK 1062049 T3 20040601; EP 1062049 A1 20001227; EP 1062049 B1 20040421; US 6460553 B1 20021008; WO 9947271 A1 19990923

DOCDB simple family (application)  
**DE 19811421 A 19980317**; DE 59909241 T 19990218; DK 99910236 T 19990218; EP 9901063 W 19990218; EP 99910236 A 19990218; US 64649400 A 20000918