

Title (en)  
Spraying device

Title (de)  
Spritzvorrichtung

Title (fr)  
Dispositif de pulvérisation

Publication  
**EP 2289640 B1 20110907 (DE)**

Application  
**EP 10165826 A 20100614**

Priority  
DE 102009039585 A 20090901

Abstract (en)  
[origin: EP2289640A1] The spraying device (1) has a container conveyor for transporting a container (3) with the mouth facing downwards. A spray nozzle (6) acts on the container from the bottom. An external spray nozzle (6a) acts on an outer surface of the container. Another external spray nozzle is directed to the outer surface of the container next to an internal spray nozzle (6i) directed to spray through the mouth of the container. The external and internal spray nozzles are arranged on a common nozzle shaft (8). An independent claim is also included for a method for cleaning containers.

IPC 8 full level  
**B08B 9/34** (2006.01)

CPC (source: EP US)  
**B08B 9/34** (2013.01 - EP US)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)  
**EP 2289640 A1 20110302; EP 2289640 B1 20110907**; AT E523269 T1 20110915; BR PI1002896 A2 20120529; CN 102000685 A 20110406; CN 102000685 B 20160803; DE 102009039585 A1 20110317; US 2011048463 A1 20110303

DOCDB simple family (application)  
**EP 10165826 A 20100614**; AT 10165826 T 20100614; BR PI1002896 A 20100831; CN 201010262107 A 20100823; DE 102009039585 A 20090901; US 87008310 A 20100827