

Title (en)

APPARATUS AND CIRCUIT FOR THE CREATION OF VORTEX RINGS

Publication

EP 0219837 A3 19880302 (DE)

Application

EP 86114464 A 19861018

Priority

DE 3537856 A 19851024

Abstract (en)

[origin: US4735282A] A device for the generation of vortex rings which consists of a box supplied with orifices and electromechanic transformers. The electromechanic transformers are controlled by signalers and cause pressure waves within the box which form vortex rings at the orifices. As signalers low-frequency amplifiers can be used which send out music or speech signals or electronic circuits which form a kind of optimized signal.

IPC 1-7

A63J 5/00; A63J 17/00; H04R 3/00; A63H 33/28

IPC 8 full level

A63J 5/02 (2006.01)

CPC (source: EP US)

A63J 5/025 (2013.01 - EP US); **A63J 2005/026** (2013.01 - EP US)

Citation (search report)

- [Y] US 2788607 A 19570416 - WARD DONALD R
- [Y] US 3806920 A 19740423 - ALLISON H
- [A] US 2628450 A 19530217 - SHELTON THOMAS M
- [A] GB 964802 A 19640722 - NORMAN HENRY JAMIESON
- [A] US 3294322 A 19661227 - KOREICHI KAWAMURA, et al

Cited by

WO2006138154A1

Designated contracting state (EPC)

AT BE CH DE ES FR GB IT LI LU NL SE

DOCDB simple family (publication)

EP 0219837 A2 19870429; EP 0219837 A3 19880302; DE 3537856 A1 19870507; DE 3537856 C2 19880428; US 4735282 A 19880405

DOCDB simple family (application)

EP 86114464 A 19861018; DE 3537856 A 19851024; US 91799286 A 19861010