

Title (en)  
A HYDROELECTRIC POWERPLANT

Title (de)  
HYDROELEKTRISCHES KRAFTWERK

Title (fr)  
CENTRALE HYDROELECTRIQUE

Publication  
**EP 1711708 A4 20110413 (EN)**

Application  
**EP 04704062 A 20040121**

Priority  
US 2004001542 W 20040121

Abstract (en)  
[origin: WO2005080789A1] A powerplant for use in high head applications (dams) which allows marine animals (fish, otters, turtles, etc.) to swim safely from one side of the dam to the other. The turbine blades which take energy from the water to produce electricity have a large hole through their center. They are arranged one behind the other in such a way that the velocity of the water is decreased as it passes through each blade. The large holes through the center of the turbine blades and the decreasing of the water flow, while increasing the amount of energy produced, will allow marine life to easily swim back and forth through the dam.

IPC 8 full level  
**F03B 3/04** (2006.01); **F03B 13/08** (2006.01); **F03B 17/06** (2006.01)

CPC (source: EP)  
**F03B 3/04** (2013.01); **F03B 13/083** (2013.01); **F03B 17/061** (2013.01); **F05B 2240/97** (2013.01); **Y02E 10/20** (2013.01)

Citation (search report)

- [X] US RE38336 E 20031202 - WILLIAMS HERBERT L [US]
- [I] CA 2352673 A1 20030105 - PALMA FLORENCIO NETO [CA]
- [A] US 2002034437 A1 20020321 - WILLIAMS HERBERT LEHMAN [US]
- See references of WO 2005080789A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2005080789 A1 20050901**; CA 2586063 A1 20050901; CA 2586063 C 20120904; EP 1711708 A1 20061018; EP 1711708 A4 20110413

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**US 2004001542 W 20040121**; CA 2586063 A 20040121; EP 04704062 A 20040121