

Title (en)  
INNOVATIVE HORIZONTAL AXIS WIND TURBINE OF HIGH EFFICIENCY

Title (de)  
INNOVATIVE HOCHLEISTUNGSWINDTURBINE MIT HORIZONTALER ACHSE

Title (fr)  
EOLIENNE À AXE HORIZONTAL INNOVANTE PRÉSENTANT UN RENDEMENT ÉLEVÉ

Publication  
**EP 2137405 A2 20091230 (EN)**

Application  
**EP 08719104 A 20080327**

Priority  
• GR 2008000020 W 20080327  
• GR 20070100193 A 20070330

Abstract (en)  
[origin: WO2008120026A2] Horizontal axis wind turbine, characterized of the use of an innovative rotor (7), achieving high power to volume ratio, compared to single row of blades, conventional, horizontal axis wind turbines. The innovative rotor is made up of two rows of blades the stationary, first row (1) and the rotating second one (2). The blade superposition of the first row generates a series of nozzles (5) of suitable cross sections that accelerate the air-flow, which impacts the blades of second row, with optimum angle, causing the power shaft (6) to rotate. Furthermore the so produced energy is transferred classically through a gear-box to the generator.

IPC 8 full level  
**F03D 1/04** (2006.01)

CPC (source: EP GR US)  
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Citation (search report)  
See references of WO 2008120026A2

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**WO 2008120026 A2 20081009; WO 2008120026 A3 20090514; WO 2008120026 A4 20090625**; EP 2137405 A2 20091230; GR 1005872 B 20080415

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