

Title (en)
OMNI-DIRECTIONAL WIND POWER STATION

Title (de)
OMNIDIREKTIONALE WINDENERGIESTATION

Title (fr)
USINE ÉOLIENNE OMNI-DIRECTIVE

Publication
EP 2054619 A4 20141015 (EN)

Application
EP 07784728 A 20070806

Priority
• AU 2007001086 W 20070806
• AU 2006904237 A 20060807

Abstract (en)
[origin: WO2008017106A1] A wind power station comprising an array of individual omni directional, vertical discharge wind turbines, arranged critically spaced in various configurations to generate electrical power. Each of the individual omni directional wind turbines consists of a shroud that captures wind from any direction and directs it to flow vertically through a throat section where an aerofoil multi-bladed rotor is connected to an electrical power generator via a rotating shaft. The intake of the shroud incorporates multiple horizontally curved blades secured in place by multiple vertical walls such that while accelerating and focusing the wind, across the full swept area of the rotor blades, the loss of air from the central collection chamber is significantly reduced by the air flow forming a fluid dynamic gate across inactive faces. The critically arranged configurations generate higher levels of power than a random arrangement of vertical turbine units.

IPC 8 full level
F03D 1/04 (2006.01)

CPC (source: EP US)
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Citation (search report)
• [ID] WO 2006066310 A1 20060629 - KATRU ECO INV S PTY LTD [AU], et al
• [A] DE 463711 C 19280809 - KARL KUEHN
• [A] US 4017205 A 19770412 - BOLIE VICTOR W
• See references of WO 2008017106A1

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