

Title (en)  
SHROUD OR RING PROPELLER BLADE INTERFACE

Title (de)  
MANTEL- ODER RINGPROPELLERFLÜGELSCHNITTSTELLE

Title (fr)  
INTERFACE DE PALE D'HELICE CARENEE OU RENFORCEE

Publication  
**EP 1773653 A1 20070418 (EN)**

Application  
**EP 05753868 A 20050629**

Priority  
• AU 2005000952 W 20050629  
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Abstract (en)  
[origin: WO2006002464A1] A ring propeller (10) has a central hub (19) with a plurality of integral, outwardly extending propeller blades (12), and a shroud ring (17) of substantially circular configuration connecting tips (18) of the blades (12). The shroud ring (17) has a shaped outer surface and an inner surface between blade trips (18) that includes first (21) and second (22) parts, each tapering outwardly in opposite axial directions. The features of the tip portion (18) of the blade (12) also increasing in chord length distribution to form a forwardly extending, large radius fillet (20) where the blade tip (18) blends with the inner surface (22), and the root portion having a blade thickness that decreases with increasing radius, the mid-section having a rate of decrease of blade thickness with increasing radius substantially less than that of the root portion, and the blade thickness of the tip portion (18) increasing with radius to merge into an inner surface of the ring (17), the thickness changes being effected by changes to the low pressure surface away from a helical surface shape, are also disclosed.

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CPC (source: EP)  
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