

Title (en)
High speed supersonic impulse turbine.

Title (de)
Impulsturbine für Überschallströmung.

Title (fr)
Turbine à impulsion pour un fluide supersonique.

Publication
EP 0097605 A2 19840104 (EN)

Application
EP 83630094 A 19830602

Priority
US 39001482 A 19820621

Abstract (en)
The buckets (20) of a turbine wheel (10) are formed as a series of equally spaced, overlapping portions of a cylinder in the grooved rim of a wheel forging. As a result of this construction, the leading edge of the buckets (20) is eliminated and is therefore not subject to 90 DEG erosion. Additionally, the resulting bucket profiles result in very low impingement angles for moisture droplets or particulates which further minimizes low angle erosion.

IPC 1-7
F01D 1/02; **F01D 1/34**

IPC 8 full level
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CPC (source: EP)
F01D 1/02 (2013.01); **F01D 1/34** (2013.01)

Cited by
GB2270543A; CN106368753A; US5427499A; EP0362836A1; US4932598A

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EP 0097605 A2 19840104; **EP 0097605 A3 19841010**; **EP 0097605 B1 19870819**; DE 3373119 D1 19870924; JP S597701 A 19840114

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