

Title (en)
COMPRESSOR FOR GAS TURBINES

Title (de)
VERDICHTER FÜR GASTURBINEN

Title (fr)
COMPRESSEUR POUR TURBINES A GAZ

Publication
EP 1458981 A1 20040922 (DE)

Application
EP 02803485 A 20021112

Priority
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Abstract (en)
[origin: WO03044374A1] A compressor for a gas turbine comprises, on the surfaces of its components, particularly of its blading, a coating for protecting the surfaces from erosion. The coating comprises at least two layers or a number of layer pairs made of an amorphous carbon or of a plasma polymer. The layers have an inherently high degree of hardness, and the outermost layer of the coating exhibits hydrophobic properties. The hardness of an inner layer of a layer pair is, in addition, higher than the hardness of an outer layer. The coating is particularly suited for preventing impingement erosion caused by liquid drops, erosion caused by solid particles such as ice, and soiling caused by the deposit of dust particles and by constituents dissolved in liquids. The coating extends the serviceable life of the components and increases the turbine output.

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IPC 8 full level
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Citation (search report)
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