

Title (en)
Turbomachine vane damper

Title (de)
Stoßdämpfer für Laufradschaufeln eines Turbotriebwerks

Title (fr)
Amortisseur pour aubes de turbomachine

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EP 1985810 A1 20081029 (FR)

Application
EP 08155206 A 20080425

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Abstract (en)
The damper (10) has a base plate (13) supported on a disk rim of a rotor of a turbomachine e.g. high pressure gas turbine engine axial compressor, and a spring plate (12). The plate (12) connects an elongated counterweight (11) with the plate (13), where the counterweight is made of composite material i.e. impregnated fabric. The counterweight has contact surface portions that are contacted with platforms of vanes. The portions form an angle that is lower than 90 degree, with the plate (13), when the plate (12) is at rest.

Abstract (fr)
La présente invention porte sur un amortisseur pour aubes de turbomachine, agencé pour être logé entre la face inférieure des plateformes de deux aubes adjacentes de turbomachine et la jante du disque de rotor sur lequel les aubes sont montées. Cet amortisseur est caractérisé par le fait qu'il comprend une masselotte (11), une semelle (13) et un ressort (12), le ressort reliant la masselotte à la semelle et dont au moins la masselotte est réalisée en matériaux composite.

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Citation (applicant)
FR 2759096 A1 19980807 - SNECMA [FR]

Citation (search report)
• [A] EP 1291492 A1 20030312 - UNITED TECHNOLOGIES CORP [US]
• [AD] FR 2759096 A1 19980807 - SNECMA [FR]
• [A] EP 0095409 A1 19831130 - SNECMA [FR]
• [A] US 5261790 A 19931116 - DIETZ PHILIP W [US], et al
• [A] EP 0089272 A1 19830921 - SNECMA [FR]

Cited by
FR2962481A1; EP2455587A1; FR3118991A1; EP4253763A3; FR3027950A1; FR3047512A1; US8888456B2; US11421534B2; FR3099213A1; WO2020239803A1; US11828191B2; FR3096733A1; WO2019115977A1; EP4253763A2; FR3096730A1; FR3096732A1; US10927683B2; WO2019122691A1; US9951625B2; FR3096729A1; WO2020239808A1; FR3096731A1; US11808169B2; WO2020239804A1; FR3096734A1; US11808170B2; EP3724455B1

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