

Title (en)

MANUFACTURING METHOD OF A POLISHED BLADED ROTOR USING ROBOTIC POLISHING DEVICE

Title (de)

HERSTELLUNGSVERFAHREN EINES POLIERTER BESCHAUFELTER ROTORS UNTER VERWENDUNG EINER ROBOTISCHER POLIERVORRICHTUNG

Title (fr)

PROCÉDÉ DE FABRICATION D'UN ROTOR À AUBES POLIES UTILISANT UN DISPOSITIF DE POLISSAGE ROBOTIQUE

Publication

EP 4393642 A2 20240703 (EN)

Application

EP 23220614 A 20231228

Priority

US 202263435476 P 20221227

Abstract (en)

A manufacturing method includes controlling a robotic polishing device (46), at a controller (48), to polish a plurality of first zones (88A; 90A) of a bladed rotor (20) for an aircraft engine based on a first operating parameter associated with the robotic polishing device (46). An exterior (56) of the bladed rotor (20) includes the first zones (88A; 90A) and a plurality of second zones (88B-F; 90B-F). The first zones (88A; 90A) are distributed circumferentially about an axis (22) of the bladed rotor (20) in a first array. The second zones (88B-F; 90B-F) are distributed circumferentially about the axis (22) of the bladed rotor (20) in a second array. The method further includes controlling the robotic polishing device (46), at a controller (48), to polish the second zones (88B-F; 90B-F) using the robotic polishing device (46) based on a second operating parameter. The second operating parameter for the robotic polishing device (56) is different than the first operating parameter.

IPC 8 full level

B24B 19/14 (2006.01); **B24B 19/26** (2006.01); **B24B 21/16** (2006.01); **B24B 21/20** (2006.01); **B24B 27/00** (2006.01); **B24B 49/16** (2006.01); **B24B 51/00** (2006.01)

CPC (source: EP US)

B24B 19/14 (2013.01 - EP); **B24B 19/26** (2013.01 - EP); **B24B 21/16** (2013.01 - EP); **B24B 21/165** (2013.01 - EP US); **B24B 21/20** (2013.01 - EP); **B24B 27/0038** (2013.01 - EP); **B24B 37/005** (2013.01 - EP US); **B24B 49/16** (2013.01 - EP); **B24B 51/00** (2013.01 - EP)

Citation (applicant)

US 197662634354 P

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4393642 A2 20240703; **EP 4393642 A3 20240911**; CA 3224869 A1 20240627; US 2024207994 A1 20240627

DOCDB simple family (application)

EP 23220614 A 20231228; CA 3224869 A 20231227; US 202318397120 A 20231227