

Title (en)

A rotor assembly and a heat/energy recovery unit having a rotor assembly

Title (de)

Rotoranordnung und Wärme-/Energierückgewinnungseinheit mit einer Rotoranordnung

Title (fr)

Ensemble formant rotor et unité de récupération de chaleur/énergie dotée de l'ensemble formant rotor

Publication

**EP 2573496 A1 20130327 (EN)**

Application

**EP 11181948 A 20110920**

Priority

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Abstract (en)

The invention relates to a rotor assembly and a heat/energy recovery unit having a rotor assembly in which inlet air (I) is heated to supply air (S) by using thermal energy of discharge air (D) such that the discharge air (D) is cooled to outlet air (O). The heat/energy recovery unit having a rotor assembly comprises: a rotor (1), an inlet plenum (14) for conducting inlet air (I) to the rotor (1), a supply plenum (15) for receiving supply air (S) from the rotor (1), a discharge plenum (16) for conducting discharge air (D) to the rotor (1), an outlet plenum (17) for receiving outlet air (O) from the rotor (1), a circumferential sealing unit (2, 6), a first axial sealing unit (4, 7), and a second axial sealing unit (5, 10). The sealing units (2, 6; 4, 7; 5, 10) are provided with a pressure balancing volume (8, 9) between the plenums (14, 15, 16, 17), said pressure balancing volume (8, 9) allowing an air leakage between the opposing plenums (14, 15); (16, 17), through the side surfaces (24), (25) of the rotor (1).

IPC 8 full level

**F28D 19/04** (2006.01)

CPC (source: EP)

**F28D 19/047** (2013.01)

Citation (search report)

- [E] WO 2011154595 A1 20111215 - SWEGON ILTO OY [FI], et al
- [XI] EP 1460349 A2 20040922 - HOVALWERK AG [LI]
- [X] WO 8808112 A1 19881020 - FLAEKT AB [SE]
- [X] US 2010200068 A1 20100812 - D ARCY MARCUS JAMES [US], et al
- [X] US 4105062 A 19780808 - BELL III ALBERT H, et al

Cited by

EP3311090A4; WO2016204671A1

Designated contracting state (EPC)

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