

Title (en)

METHOD AND DEVICE FOR GENERATING TWO PURIFIED PARTIAL AIR STREAMS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERZEUGUNG ZWEIER GEREINIGTER LUFTEILSTRÖME

Title (fr)

PROCÉDÉ ET DISPOSITIF DE PRODUCTION DE DEUX COURANTS D'AIR PARTIELS PURIFIÉS

Publication

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Application

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Abstract (en)

[origin: WO2013053425A2] The invention relates to a method and device for generating two purified partial air streams under different pressures. A total air stream (1) is compressed to a first total air pressure. The compressed total air stream (5) is cooled with cooling water under the first total air pressure by way of heat exchange (4, 6). The heat exchange with cooling water for cooling the total air stream (5) is carried out as a direct heat exchange in a first direct contact cooler (6), at least in part. The cooled total air stream (9) is divided into a first partial air stream (10) and a second partial air stream (11). The first partial air stream (10) is purified in a first purification device (18) under the first total air pressure, generating the first purified partial air stream (19). The second partial air stream (11) is re-compressed to a higher pressure (12), which is higher than the first total air pressure. The re-compressed second partial air stream (14) is cooled with cooling water in a second direct contact cooler (15) by way of direct heat exchange (13, 15). The cooled second partial air stream (17) is purified under the higher pressure in a second purification device (30), thus generating the second purified partial air stream (31).

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