

Title (en)  
Process and apparatus for air separation

Title (de)  
Vorrichtung und Verfahren zur Luftzerlegung

Title (fr)  
Dispositif et procédé de séparation de l'air

Publication  
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Application  
**EP 01123081 A 20010926**

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Abstract (en)  
A first process stream of the air separation is compressed in a first compressor (2). The first compressor (2) is mechanically coupled (4) to a steam turbine (1) and to an electric motor (3). <IMAGE>

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Citation (search report)  
• [X] US 5485719 A 19960123 - WULF JAMES B [US]  
• [A] US 4382366 A 19830510 - GAUMER LEE S  
• [A] US 6116027 A 20000912 - SMITH ARTHUR RAMSDEN [US], et al  
• [A] FR 2774158 A1 19990730 - AIR LIQUIDE [FR]  
• [A] FR 2774159 A1 19990730 - AIR LIQUIDE [FR]

Cited by  
WO2020160844A1; WO2009007310A3

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