

Title (en)
Compressor and method for compressing gaseous fuel

Title (de)
Verdichter und Verfahren zum Verdichten von gasförmigem Brennstoff

Title (fr)
Compresseur et procédé de compression de carburant gazeux

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Application
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Abstract (en)
A method for compressing gaseous fuel is disclosed, which comprises the steps: a) ingesting gaseous fuel into a chamber; b) ingesting air into the chamber and mixing the gaseous fuel with the air; c) igniting and partially combusting the resulting mixture of gaseous fuel and air in a confined space such that a predominant fraction of the gaseous fuel is not combusted, causing an increased temperature and therefore an increased pressure of the fraction of the gaseous fuel which is not combusted; and d) discharging the resulting compressed gaseous fuel. Moreover, a compressor (1) is provided, comprising a casing (2), a rotor (3) with at least three vanes (6), at least one inlet (7) for gaseous fuel, at least one outlet (11) for gaseous fuel, at least one air inlet (9) and at least one igniter (14). Furthermore, a gas turbine comprising an inventive compressor (1) is disclosed.

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Citation (applicant)
• US 2004055298 A1 20040325 - FISCHER LARRY E [US], et al
• GB 2086479 A 19820512 - TURNER MICHAEL
• DE 3321270 A1 19841004 - SCHNEIDER HEINZ

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• [XA] US 2004055298 A1 20040325 - FISCHER LARRY E [US], et al
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• [A] WO 9851914 A1 19981119 - WESTINGHOUSE ELECTRIC CORP [US]
• [A] EP 0971106 A2 20000112 - ISUZU CERAMICS RES INST [JP]

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