

Title (en)

METHOD FOR PROVIDING AND USING AN ALCOHOL AND USE OF THE ALCOHOL FOR INCREASING THE EFFICIENCY AND PERFORMANCE OF AN INTERNAL COMBUSTION ENGINE

Title (de)

VERFAHREN ZUR BEREITSTELLUNG UND ZUM EINSETZEN EINES ALKOHOLS UND VERWENDUNG DES ALKOHOLS ZUR WIRKUNGSGRAD- UND LEISTUNGSSTEIGERUNG EINER VERBRENNUNGSKRAFTMASCHINE

Title (fr)

PROCÉDÉ D'OBTENTION ET D'UTILISATION D'UN ALCOOL ET UTILISATION DUDIT ALCOOL POUR AUGMENTER LE RENDEMENT ET LES PERFORMANCES D'UN MOTEUR À COMBUSTION INTERNE

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Application

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Abstract (en)

[origin: EP2438982A1] Providing and using storable and transportable alcohol containing cooling liquid (108), comprises: providing carbon dioxide and hydrogen gas; providing a gaseous starting material comprising the carbon dioxide gas and the hydrogen gas; introducing the starting material into a reactor; passing the starting material through a reaction section of the reactor for synthesizing the cooling liquid; providing the cooling liquid at an outlet end of the reactor; and using the cooling liquid before or in the internal combustion for cooling intake air, compressor air, charge air and/or a fuel-air mixture. Providing and using storable and transportable alcohol containing cooling liquid (108), comprises: providing carbon dioxide gas as carbon source; providing hydrogen gas; providing a gaseous starting material comprising the carbon dioxide gas and the hydrogen gas; introducing the starting material into a reactor; passing the starting material through a reaction section of the reactor, which is at least partially provided with a catalyst for synthesizing the cooling liquid on the catalyst; providing the cooling liquid comprising a mixture of alcohol and water, at an outlet end of the reactor; and using the cooling liquid before or in the internal combustion engine that is supplied with a fuel, for cooling intake air, compressor air, charge air and/or a fuel-air mixture, which is supplied to the internal combustion engine, by evaporating the cooling liquid.

IPC 8 full level

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