

Title (en)

UNDERGROUND COAL GASIFICATION METHOD

Title (de)

UNTERIRDISCHES KOHLEVERGASUNGSVERFAHREN

Title (fr)

PROCÉDÉ DE GAZÉIFICATION SOUTERRAINE DU CHARBON

Publication

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Application

EP 12825017 A 20120926

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Abstract (en)

An underground coal gasification method. The method comprises disposing multiple injection wells (3) and gas collection wells (4) in a gasification operation zone; adding a catalyst and a propping agent into injection wells and gas collection wells by means of a fluid medium; fracturing and reforming the coal layer using a fracturing device to form large areas of fissures and cracks; forming gasification paths in the form of directional wells between the injection wells and gas collection wells; adding a gasification agent, a catalyst, and water through the injection wells to cause coal layer combustions and chemical reactions; collecting at the gas collection wells the gas produced by means of collection devices. The fissure paths between the wells formed by reforming large fractures, and the metal mineral particles used as a propping agent for the paths between wells effectively enable the maintenance of the effective communication in the injection well network for long durations; the metal mineral particles also function as a catalyst and an aggregating agent during gasification, thereby substantially enhancing the coal gasification volume.

IPC 8 full level

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CPC (source: EP)

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