

The Controlled Retreating Injection Point in Tunnel UCG

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Content:

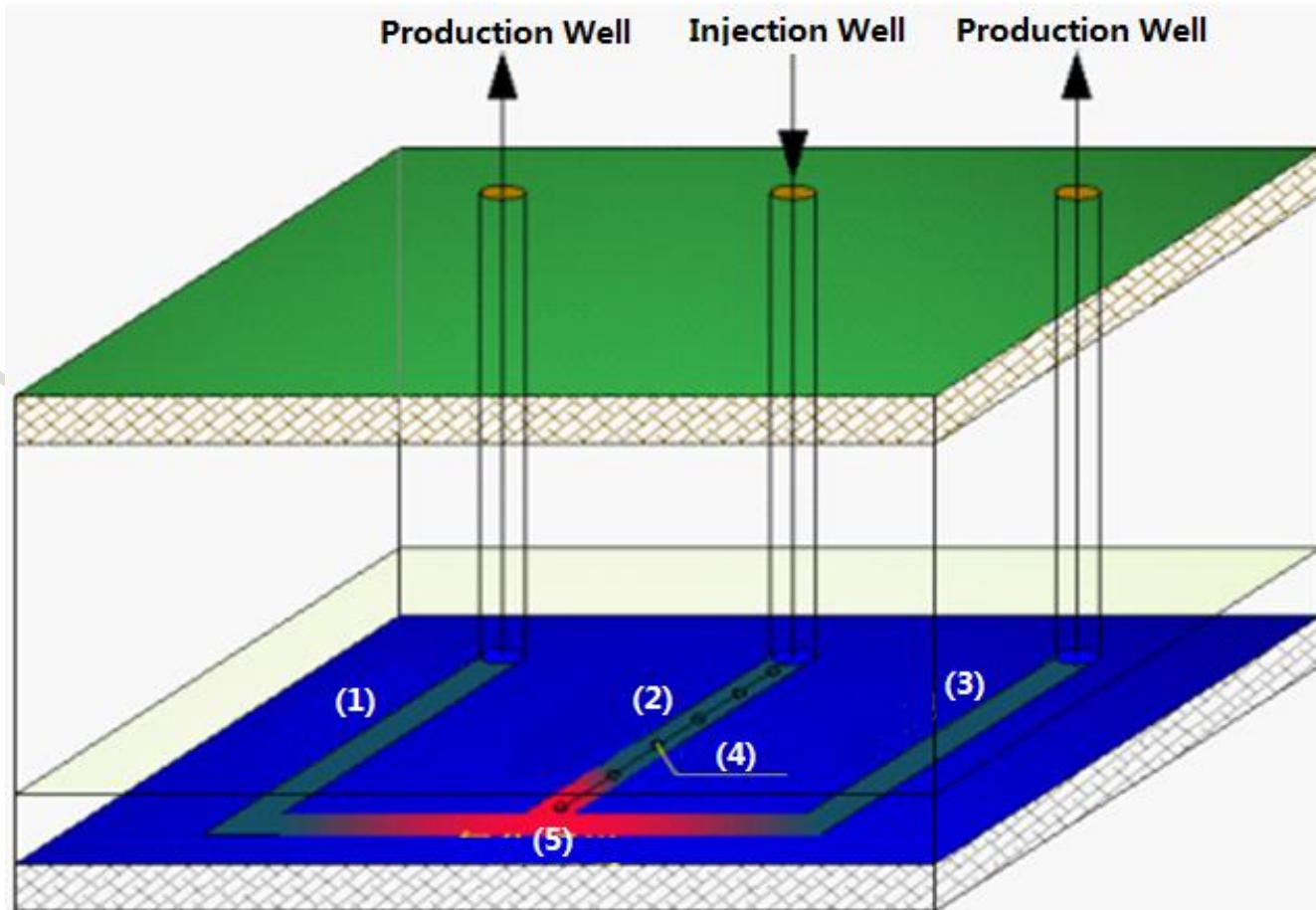
- Part One: The Controlled Retreating Injection Point
in Tunnel UCG
 - 1、 Core technology
 - 2、 Underground Unmanned Operation
- Part Two: Research and Model Test Devices
- Part Three: Our Projects

Part one: Core Technology

- Adopting 'E' type Gasification Panel
- CRIP in Tunnel UCG
- The Filling of Combustion Space Zone

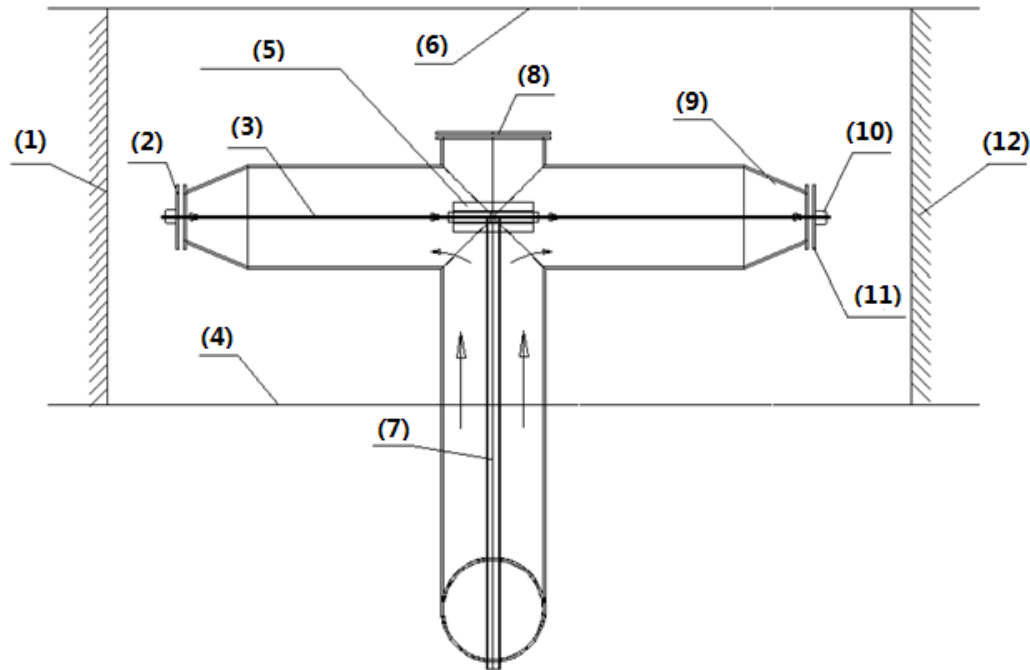
The technology has been awarded Chinese Invention patent
(Patent No.: ZL200810132905.9)

'E-type' Gasification Panel



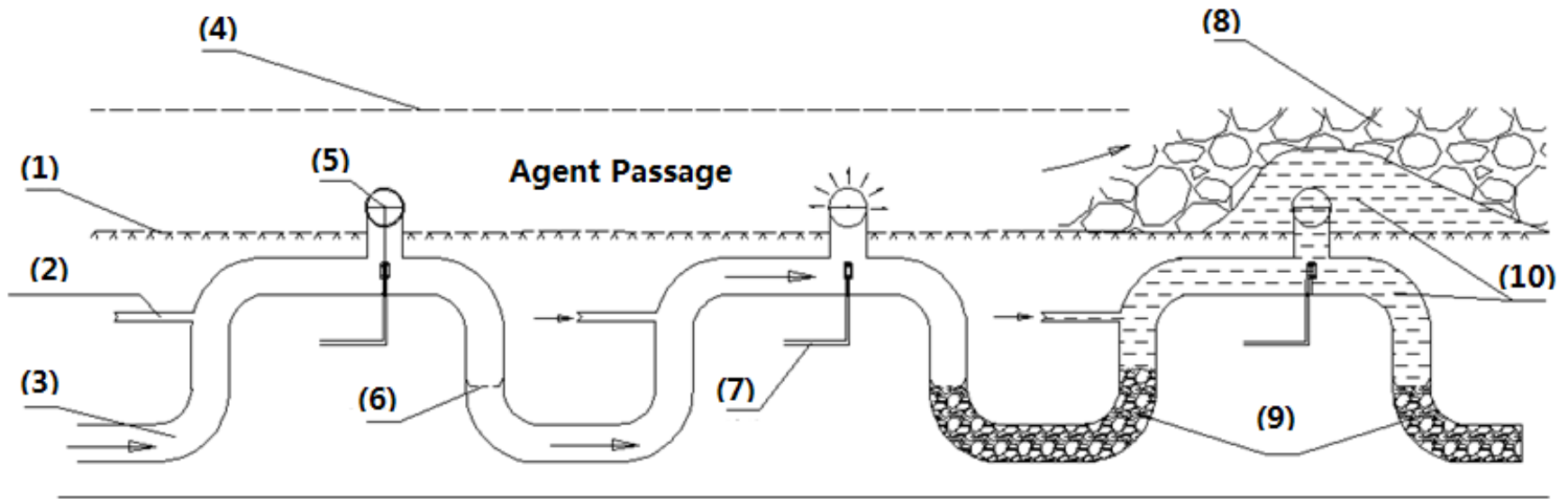
CRIP in Tunnel UCG

CRIP in Tunnel UCG



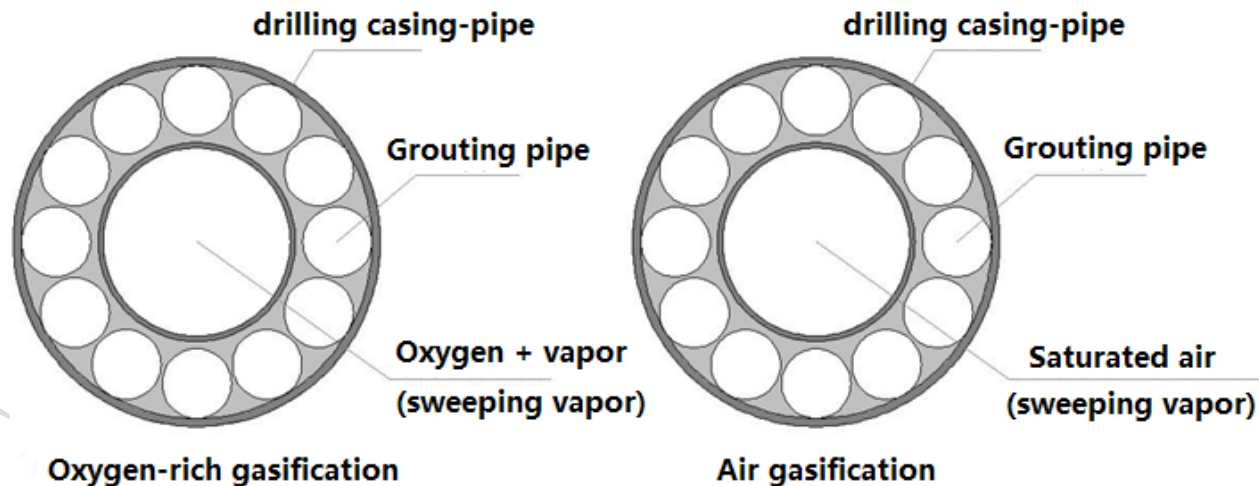
- A、 The Injection Point activated by Metal fusing;
- B、 The gasification agent is speedily sprayed towards coal walls, which enhances gasification.

The filling of combustion space zone



- A、 The injection point turned off by the grouting system;
- B、 The fillings are delivered through the grouting pipeline to fill the combustion space zone.

Underground Unmanned Production



- A、 The injecting of gasification agent and the exhausting of coal gas are through wells;
- B、 Building airtight wall to isolate the gasification panel from other mine system;
- C、 The tech is best applied to recover coal in the abandoned mine.

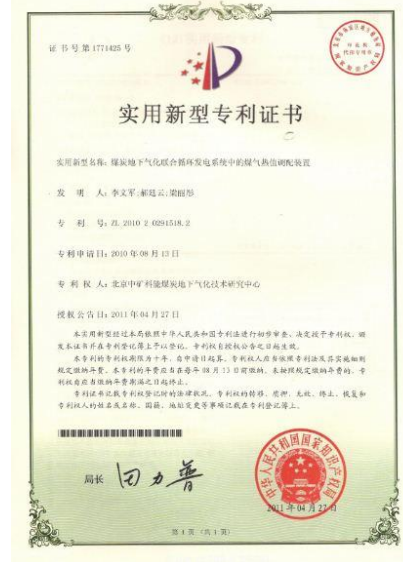
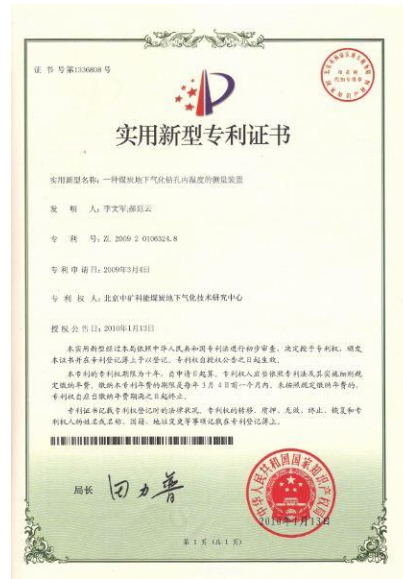
Part two: Research and Model Test Devices



- 1、 Build a new UCG Test Lab
Collaborating with NCIST;
- 2、 Establish a Test lab of
Chemical-Looping Combustion;



- 3、 NCIST is the only Institute who is under the direct lead of State Administration of Coal Mine Safety, as well as the tech training center of China Coal Mine Safety, boasting with its broad professionals in mine.



Patents

- 1、A UCG system and its processing flow (ZL 200810132905.9)
- 2、A catalytic device to improve gas quality produced by UCG (200920105771.1)
- 3、A device measuring the temperature of drilling hole in UCG (200920106324.8)
- 4、A gas heat value blending device for UCG-based IGCC power generation system (201020291518.2)

Part three: Our Projects

The projects SinoUCG participated spread over China's major coal-producing area. Here are some sample projects we made great progress:

- a) Xiaozhuang pilot UCG project, Ningwu Coal Group, Shanxi province;
- b) The industrial demonstration project of Qixian UCG in Hebi city, Henan province;
- c) Jinruimeiye UCG pilot project, Lujiang district, Shanxi Coal Logistic Group, Shanxi;
- d) The UCG project in Qinjiashan coalmine, in Datong city, Shanxi province.

Thank you !

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