

Title (en)

LONGWALL WORKING FACE, NON-PILLARED MINING METHOD

Title (de)

NICHT SÄULENFÖRMIGES ABBAUVERFAHREN MIT LANGWANDIGER ARBEITSFLÄCHE

Title (fr)

PROCÉDÉ D'EXPLOITATION MINIÈRE SANS PILIER, À FACE D'EXPLOITATION PAR LONGUE TAILLE

Publication

EP 2801697 B1 20190814 (EN)

Application

EP 12864300 A 20120106

Priority

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Abstract (en)

[origin: EP2801697A1] Disclosed is a longwall working face, non-pillared mining method, comprising the following steps: 1. Excavating a tailentry (2) and a headentry (3); 2. Reinforcing a top panel (5) of the tailentry (3) and drilling on the top panel an energy collecting hole (7) for pre-splitting blasting; 3. Extracting until a goaf is formed; 4. Blasting at a position corresponding to the energy collecting hole and forming a kerf on the top panel; 5. The mining face collapsing to become a new roadway; 6. Taking the original headentry as the tailentry of the next mining face, and excavating a headentry relative to the tailentry, to form a new mining face; and 7. Repeating steps 2-6, and continuing to mine coal until the coal seam mining is completed. The present method involves continuity between every two mining faces, non-pillared support, a short process for forming roadways, and high efficiency of mining and forming roadways.

IPC 8 full level

E21C 41/16 (2006.01); **E21C 41/18** (2006.01)

CPC (source: EP)

E21C 41/18 (2013.01)

Citation (examination)

- ZHANG GUO-FENG ET AL: "Research on the Technology of No-Pillar Mining with Gob-Side Entry Formed by Roof cutting in the Protective Seam in Baijiao Coal Mine (Translation in English)", JOURNAL OF MINING & SAFETY ENGINEERING, vol. 28, 17 January 2011 (2011-01-17), XP055410365
- NONG ZHANG ET AL: "Stability and deformation of surrounding rock in pillarless gob-side entry retaining", SAFETY SCIENCE, vol. 50, no. 4, 2 October 2011 (2011-10-02), AMSTERDAM, NL, pages 593 - 599, XP055410371, ISSN: 0925-7535, DOI: 10.1016/j.ssci.2011.09.010

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