

Title (en)

METHOD FOR CONTROLLING LONGWALL MINING OPERATIONS, TAKING INTO ACCOUNT AIR AND AIR CONDITIONING RESOURCES

Title (de)

VERFAHREN ZUR STEUERUNG VON STREBBETRIEBEN UNTER EINBEZIEHUNG VON WETTER- UND KLIMATECHNISCHEN RESSOURCEN

Title (fr)

PROCÉDÉ POUR ASSURER LA COMMANDE D'INSTALLATIONS D'EXPLOITATION PAR TAILLE, EN TENANT COMPTE DE RESSOURCES EN AIR DE MINE ET DE RESSOURCES DE CLIMATISATION

Publication

EP 2247828 A1 20101110 (DE)

Application

EP 08715854 A 20080219

Priority

EP 2008001267 W 20080219

Abstract (en)

[origin: WO2009103308A1] Disclosed is a method for controlling the yield of longwall coal mining operations. In said method, the demand of each longwall operation for air and air conditioning resources, i.e. the air to be supplied, the cooling power to be made available by cooling systems used, and the gas aspiration to be installed, is determined as variables influencing an expected yield in the form of desired data to be stored in a computer unit, said demand being determined based on the data to be specified for the machinery required for the longwall operations and the deposit parameters applicable to the face areas to be mined by each longwall operation, and the actual data for the quantity of extracted raw coal, the air flowing through each longwall operation, the supplied cooling power, and the gas aspiration is acquired during the extraction process by means of installed sensors and is fed to the computer unit. When a demand for additional air and air conditioning resources is identified, said demand is met by redirecting excess resources available in other longwall operations, and when a smaller demand is identified, excess resources are redirected to other longwall operations having a shortage of needed resources.

IPC 8 full level

E21F 3/00 (2006.01); **E21C 41/16** (2006.01); **E21F 1/00** (2006.01)

CPC (source: EP US)

E21C 41/16 (2013.01 - EP US); **E21F 1/006** (2013.01 - EP US); **E21F 3/00** (2013.01 - EP US)

Citation (search report)

See references of WO 2009103308A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

WO 2009103308 A1 20090827; AU 2008351277 A1 20090827; AU 2008351277 B2 20110714; CN 101970799 A 20110209;
EP 2247828 A1 20101110; US 2011029138 A1 20110203; US 8380345 B2 20130219

DOCDB simple family (application)

EP 2008001267 W 20080219; AU 2008351277 A 20080219; CN 200880127133 A 20080219; EP 08715854 A 20080219;
US 91847808 A 20080219