

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT7659225

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
CATERPILLAR GLOBAL MINING EUROPE GMBH	09/29/2022
RECEIVING PARTY DATA	
Name:	CATERPILLAR INC.
Street Address:	100 NE ADAMS STREET
City:	PEORIA
State/Country:	ILLINOIS
Postal Code:	61629-6450
PROPERTY NUMBERS Total: 49	
Property Type	Number
Patent Number:	6774537
Patent Number:	6985345
Patent Number:	6896121
Patent Number:	7325670
Patent Number:	7040174
Patent Number:	7188441
Patent Number:	7070040
Patent Number:	7104392
Patent Number:	7428861
Patent Number:	7177709
Patent Number:	6991407
Patent Number:	7237983
Patent Number:	7073870
Patent Number:	7310897
Patent Number:	7503629
Patent Number:	7320625
Patent Number:	7201541
Patent Number:	7604113
Patent Number:	7631942
Patent Number:	7872846

Property Type	Number
Patent Number:	7641286
Patent Number:	7997402
Patent Number:	7775342
Patent Number:	7575284
Patent Number:	7489216
Patent Number:	7562764
Patent Number:	7896445
Patent Number:	8276991
Patent Number:	8276990
Patent Number:	8632134
Patent Number:	8450004
Patent Number:	8066112
Patent Number:	8474606
Patent Number:	8627948
Patent Number:	8365901
Patent Number:	8794429
Patent Number:	8631930
Patent Number:	8844711
Patent Number:	8662287
Patent Number:	9206821
Patent Number:	8783445
Patent Number:	8944519
Patent Number:	8490779
Patent Number:	9051832
Patent Number:	9273552
Patent Number:	9109445
Patent Number:	8885358
Patent Number:	9166801
Patent Number:	8998343

CORRESPONDENCE DATA

Fax Number: (309)675-1236

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Address Line 4: PEORIA, ILLINOIS 61629-6450

NAME OF SUBMITTER:	LINDA L. MAYERNICH
SIGNATURE:	/Linda L. Mayernich/
DATE SIGNED:	11/22/2022
Total Attachments: 36 source=Assignment_CGME_to_Cat#page1.tif source=Assignment_CGME_to_Cat#page2.tif source=Assignment_CGME_to_Cat#page3.tif source=Assignment_CGME_to_Cat#page4.tif source=Assignment_CGME_to_Cat#page5.tif source=Assignment_CGME_to_Cat#page6.tif source=Assignment_CGME_to_Cat#page7.tif source=Assignment_CGME_to_Cat#page8.tif source=Assignment_CGME_to_Cat#page9.tif source=Assignment_CGME_to_Cat#page10.tif source=Assignment_CGME_to_Cat#page11.tif source=Assignment_CGME_to_Cat#page12.tif source=Assignment_CGME_to_Cat#page13.tif source=Assignment_CGME_to_Cat#page14.tif source=Assignment_CGME_to_Cat#page15.tif source=Assignment_CGME_to_Cat#page16.tif source=Assignment_CGME_to_Cat#page17.tif source=Assignment_CGME_to_Cat#page18.tif source=Assignment_CGME_to_Cat#page19.tif source=Assignment_CGME_to_Cat#page20.tif source=Assignment_CGME_to_Cat#page21.tif source=Assignment_CGME_to_Cat#page22.tif source=Assignment_CGME_to_Cat#page23.tif source=Assignment_CGME_to_Cat#page24.tif source=Assignment_CGME_to_Cat#page25.tif source=Assignment_CGME_to_Cat#page26.tif source=Assignment_CGME_to_Cat#page27.tif source=Assignment_CGME_to_Cat#page28.tif source=Assignment_CGME_to_Cat#page29.tif source=Assignment_CGME_to_Cat#page30.tif source=Assignment_CGME_to_Cat#page31.tif source=Assignment_CGME_to_Cat#page32.tif source=Assignment_CGME_to_Cat#page33.tif source=Assignment_CGME_to_Cat#page34.tif source=Assignment_CGME_to_Cat#page35.tif source=Assignment_CGME_to_Cat#page36.tif	

PATENT ASSIGNMENT AGREEMENT

WHEREAS, in an Intellectual Property Transfer Agreement effective December 31, 2020 ("2020 Agreement") by and between Caterpillar Global Mining Europe GmbH, a limited liability company organized under the laws of Germany and having an address at Industriestrasse 1, Lunen D-44534 Germany ("ASSIGNOR") and Caterpillar Inc., a corporation organized under the laws of the State of Delaware and having an address at 100 NE Adams St., Peoria, Illinois 61629 ("ASSIGNEE"), ASSIGNOR assigned and transferred to ASSIGNEE all ASSIGNOR's right, title and interest in and to the invention(s), patent(s), patent application(s), and/or other grant(s) of, registration(s) of, and/or application(s) for intellectual property rights set forth in Annex A attached hereto ("ASSIGNED ASSETS"); and

WHEREAS, ASSIGNOR and ASSIGNEE are desirous of enabling ASSIGNEE to exploit, perfect and record its sole ownership of such right, title and interest by further confirming and memorializing such assignment and transfer in this agreement.

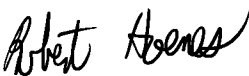
NOW, THEREFORE:

1. ASSIGNOR hereby represents, warrants and confirms that it assigned and transferred the entire right, title and interest in and to the ASSIGNED ASSETS to ASSIGNEE in the 2020 Agreement for good, valuable and sufficient consideration that was received by ASSIGNOR in accordance with the 2020 Agreement, and ASSIGNEE represents, warrants and confirms that it tendered such consideration to ASSIGNOR and accepted such assignment and transfer. ASSIGNOR and ASSIGNEE further represent, warrant and confirm that such assignment and transfer included all rights to file applications throughout the world claiming priority to any and all pending applications in the ASSIGNED ASSETS, and further included any and all patents (including continuations and divisionals) issuing from any such applications and/or from the ASSIGNED ASSETS, as well as all counterparts, reissues, reexaminations, and extensions thereof, and any and all future rights therein, throughout the world.

2. Solely to the extent necessary to enable ASSIGNEE to exploit, perfect and record its ownership of all right, title and interest in and to the ASSIGNED ASSETS, ASSIGNOR hereby (a) sells, assigns, transfers and conveys unto ASSIGNEE the entire right, title and interest in and to the ASSIGNED ASSETS, and (b) authorizes and requests that the respective governmental bodies grant to ASSIGNEE any and all patents and/or other grant(s) or registration(s) of intellectual property rights issuing from or otherwise arising out of the ASSIGNED ASSETS. ASSIGNOR and ASSIGNEE acknowledge and agree that this Section 2 does not amend or affect the validity and/or enforceability of the 2020 Agreement in any way.

3. The assignment in the 2020 Agreement (and to the extent necessary, in Section 2 of this agreement) inures to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, ASSIGNOR'S heirs and legal representatives.

CATERPILLAR INC.

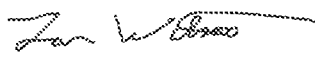
By: 

Name: Robert Hoenes

Title: Senior Vice President Resource Industries

Date: 10-04-2022

**CATERPILLAR GLOBAL MINING
EUROPE GMBH**

By: 

Name: Ian Wilson

Title: Managing Director

Date: 09-29-2022

SCHEDULE A

PATENTS

Patent Application Title	Country	Filed Date	Application Number	Publication Date	Publication Number	Grant Date	Patent No.
LONGWALL MINING WITH BLASTING	Chile	2000-11-30	3284-2000			2012-06-05	48.581
Connector for a Cable for Underground Mining	United States of America	2002-08-21	10/225002	2004-02-26	2004-0038578	2005-10-25	6957970
Warning Tone Transmitter	Australia	2002-09-27	2002301363			2006-05-04	2002301363
Warning Tone Transmitter	Poland	2002-09-25	P356279			2011-11-30	209974
Warning Tone Transmitter	United States of America	2002-09-30	10/260842	2003-04-03	2003-0062992	2004-08-10	6774537
Method and a Device for Operating an Electro-Magnet on an Intrinsically Safe Direct Current Circuit	China	2002-12-25	02158827.9		CN001257517B	2006-05-24	02158827.9
Method and a Device for Operating an Electro-Magnet on an Intrinsically Safe Direct Current Circuit	United States of America	2003-03-19	10/391699	2003-09-25	2003-0179534	2006-01-10	6985345
Conveyor Pan	Germany (Federal Republic of)	2003-04-17	03008962.7	2003-11-19	EP 1362805	2005-08-31	50301063.4
Conveyor Pan	Poland	2003-05-12	360073			2010-02-26	204770
Conveyor Pan	Russian Federation	2003-05-16	2003114532			2007-10-27	2309105
Conveyor Pan	United States of America	2003-05-15	10/438593	2003-11-20	2003-0213677	2005-05-24	6896121
Conveyor Pan	Australia	2003-05-16	2003204250			2009-09-03	2003204250
Conveyor Pan	China	2003-03-20	03107414.6		CN1458049A	2009-06-17	03107414.6
Conveyor Pan	China	2003-03-20	03107411.1		CN1458048A	2007-06-06	03107411.1
Conveyor Pan	China	2003-03-20	03107410.3		CN1458047	2007-06-06	03107410.3
Conveyor Pan	China	2003-03-20	03107413.8		CN1473744	2010-05-26	03107413.8
Conveyor Pan	United States of America	2003-08-04	10/633784	2004-02-12	2004-0026216	2008-02-05	7325670

CONTROLLER FOR UNDERGROUND MINING	China	2004-05-09	200410042143.5	2004-12-01	CN1550941A	2012-10-03	200410042143.5
CONTROLLER FOR UNDERGROUND MINING	Poland	2004-05-04	367645			2009-06-30	202249
CONTROLLER FOR UNDERGROUND MINING	Russian Federation	2004-05-07	20041114249			2009-11-27	2374670
CONTROLLER FOR UNDERGROUND MINING	United States of America	2004-05-07	10/840825	2004-12-16	2004-0254651	2007-02-13	7177709
CONTROLLER FOR UNDERGROUND MINING	Australia	2004-05-05	2004201898			2009-04-30	2004201898
Pressure Cell Device for Measuring Hydraulic Pressures	China	2003-10-16	200310101270.3		CN1508525A	2008-04-30	200310101270.3
Pressure Cell Device for Measuring Hydraulic Pressures	United States of America	2003-12-17	10/738513	2004-07-08	2004-0129085	2006-05-09	7040174
PLOW GUIDE FOR A CHAIN-PULLED PLOW	China	2004-04-28	200410036672.4		CN001564801B	2009-12-02	200410036672.4
PLOW GUIDE FOR A CHAIN-PULLED PLOW	Poland	2004-05-04	367642			2009-06-30	202248
PLOW GUIDE FOR A CHAIN-PULLED PLOW	Russian Federation	2004-05-06	2004113957			2009-01-10	2343278
PLOW GUIDE FOR A CHAIN-PULLED PLOW	United States of America	2004-05-05	10/839484	2004-12-23	2004-0256907	2007-03-13	7188441
Toggle and Toggle Connection Assembly	Poland	2004-05-04	367644			2009-06-30	202297
Toggle and Toggle Connection Assembly	Russian Federation	2004-05-06	2004113958			2008-10-10	2335635
Toggle and Toggle Connection Assembly	United States of America	2004-05-05	10/839088	2004-11-11	2004-0222067	2006-07-04	7070040
Toggle and Toggle Connection Assembly	China	2004-04-28	200410036674.3		CN001550429B	2010-06-02	200410036674.3
Toggle Retainer for Toggle Connections and Toggle Pocket for Toggle Retainer	China	2004-04-28	200410036673.9		CN001550428B	2010-12-01	200410036673.9
Toggle Retainer for Toggle Connections and Toggle Pocket for Toggle Retainer	Poland	2004-05-04	367643			2008-12-29	202296

Toggle Retainer for Toggle Connections and Toggle Pocket for Toggle Retainer	Russian Federation	2004-05-06	2004113959				2008-07-10	2328436
Toggle Retainer for Toggle Connections and Toggle Pocket for Toggle Retainer	United States of America	2004-05-05	10/839485	2005-01-13	2005-0008447		2006-09-12	7104392
Valve for Hydraulic Props of Shield-Type Support Frames, and Shield-Type Support Frame	Australia	2004-05-05	2004236389				2009-08-06	2004236389
Valve for Hydraulic Props of Shield-Type Support Frames, and Shield-Type Support Frame	United States of America	2004-05-05	10/551932	2006-09-28	2006-0213363		2008-09-30	7428861
Valve for Hydraulic Props of Shield-Type Support Frames, and Shield-Type Support Frame	Poland	2004-05-05	367646				2009-06-30	202250
LIFT CYLINDER ASSEMBLY	Australia	2004-05-05	2004201864				2008-10-09	2004201864
LIFT CYLINDER ASSEMBLY	China	2004-05-19	200410044642.8		CN001550639B		2010-08-04	200410044642.8
LIFT CYLINDER ASSEMBLY	Poland	2004-05-18	368062				2009-06-30	202298
LIFT CYLINDER ASSEMBLY	United States of America	2004-05-13	10/844694	2004-12-09	2004-0244999		2006-01-31	6991407
HYDRAULIC SHIELD SUPPORT	United States of America	2004-06-22	10/874081	2004-12-23	2004-0258487		2007-07-03	7237983
Face Equipment for use in Extraction	China	2004-09-07	200410076814.X		CN001605714B		2010-09-08	200410076814.X
Face Equipment for use in Extraction	Poland	2004-09-03	P369880				2012-12-31	213034
Bit Holder for a Ploughing Bit of a Coal or Extraction Plough and Ploughing Bit	China	2004-11-24	200410095040.5	2005-07-13	CN1637231A		2009-12-02	200410095040.5
Bit Holder for a Ploughing Bit of a Coal or Extraction Plough and Ploughing Bit	Poland	2004-12-20	371844				2010-07-30	206240

Bit Holder for a Ploughing Bit of a Coal or Extraction Plough and Ploughing Bit	Russian Federation	2004-12-28	2004138731				2008-09-20	2334103
Bit Holder for a Ploughing Bit of a Coal or Extraction Plough and Ploughing Bit	United States of America	2004-11-30	11/000024	2005-06-30	2005-0140099		2006-07-11	7073870
BIT HOLDER FOR A PLOUGHING BIT AND PLOUGHING BIT	Russian Federation	2004-12-28	2004138734				2008-09-20	2334104
BIT HOLDER FOR A PLOUGHING BIT AND PLOUGHING BIT	United States of America	2004-11-30	11/000275	2005-07-14	2005-0150667		2007-12-25	7310897
BIT HOLDER FOR A PLOUGHING BIT AND PLOUGHING BIT	China	2004-11-24	200410095039.2	2005-07-13	CN1637230A		2010-06-16	200410095039.2
BIT HOLDER FOR A PLOUGHING BIT AND PLOUGHING BIT	Poland	2004-12-20	371843				2011-01-31	207729
Pick Locking Device Including a Clamp Element and a Retaining Pin	Poland	2004-12-20	371845				2010-10-27	206684
Pick Locking Device Including a Clamp Element and a Retaining Pin	United States of America	2004-12-28	11/044635	2008-01-10	2008-0007107		2009-03-17	7503629
Coal Plow Cutter	Poland	2005-04-11	374288				2011-04-29	208351
MINING MACHINE WITH RELEASABLE GUIDE PIECE AND THE GUIDE PIECE FOR IT	Poland	2005-01-20	372354				2011-02-28	207792
PLOUGH FOR UNDERGROUND MINING	China	2004-11-24	200410095042.4	2005-07-20	CN1641186A		2010-05-26	200410095042.4
PLOUGH FOR UNDERGROUND MINING	Poland	2005-01-10	372148				2010-10-29	207027
PLOUGH FOR UNDERGROUND MINING	Russian Federation	2005-01-13	2005100729				2009-03-27	2350748
Extraction Apparatus (Selective Shearer)	Belarus	2005-12-22	A20051285				2011-12-26	15647
INTRINSICALLY-SAFE BATTERY POWER	United States of America	2008-12-22	12/341745	2009-06-04	2009-0142629		2013-05-28	8450004

Chisel Support Adjustment Arrangement and Corresponding Production Plane	China	2006-10-11	200610142384.6	2007-04-18	CN1948709A	2012-02-29	200610142384.6
Chisel Support Adjustment Arrangement and Corresponding Production Plane	Poland	2006-10-10	380809			2012-07-31	211895
Chisel Support Adjustment Arrangement and Corresponding Production Plane	Russian Federation	2006-10-11	2006136066			2010-10-20	2401945
Connection Device	Poland	2006-10-10	380810			2012-07-31	211974
Connection Device	Russian Federation	2006-10-11	2006136064			2010-06-10	2391506
Connection Device	China	2006-10-11	200610142385.0	2007-04-18	CN1948712A	2010-11-17	200610142385.0
Mining Plow	China	2006-10-12	200610132165.X	2007-04-25	CN1952348A	2011-10-05	200610132165.X
Mining Plow	Poland	2006-10-16	380833			2012-07-31	211968
Mining Plow	Russian Federation	2006-10-16	2006136429			2010-10-20	2401946
Mining Plow	United States of America	2006-10-17	11/582529	2007-04-26	2007-0090677	2009-08-18	7575284
Mining Plow	Germany (Federal Republic of)	2005-10-17	102005049971.6			2016-03-10	102005049971
Housing Cover for Switching Solenoid Housing	United States of America	2006-10-19	11/583615	2007-05-17	2007-0109083	2009-02-10	7489216
Shearer-Loader Drive Subassembly and Guide Shoe for It	China	2007-07-06	200710127985.4	2008-01-16	CN101105127A	2011-12-21	200710127985.4
Shearer-Loader Drive Subassembly and Guide Shoe for It	Poland	2007-07-11	382890			2012-12-31	212893
Shearer-Loader Drive Subassembly and Guide Shoe for It	Australia	2007-07-11	2007203234			2013-03-14	2007203234
Entry Conveyor and Pan	United States	2007-05-30	11/755184	2008-02-21	2008-0041693	2009-07-21	7562764

Section for the Same	of America								
Entry Conveyor and Pan Section for the Same	Australia	2007-05-29	2007202462					2012-06-21	2007202462
Entry Conveyor and Pan Section for the Same	China	2007-05-29	200710106457.0	2007-12-05	CN101081660A			2013-02-13	200710106457.0
Entry Conveyor and Pan Section for the Same	Germany (Federal Republic of)	2006-05-30	102006025517.8					2022-02-24	10 2006 025 517
Link Chain for Chain Conveyors and Chain Wheel Thereof	United States of America	2006-03-24	12/225267	2009-11-05	2009-0272632			2011-08-16	7997402
Link Chain for Chain Conveyors and Chain Wheel Thereof	Germany (Federal Republic of)	2006-03-24	06723713.1		EP1999045			2010-05-19	502006007000.6
Link Chain for Chain Conveyors and Chain Wheel Thereof	Australia	2006-03-24	2006340715					2011-02-24	2006340715
Link Chain for Chain Conveyors and Chain Wheel Thereof	China	2006-03-24	200680026112.8		CN101223092			2010-07-07	200680026112.8
Scrapers for Link Chains of Scraper Chain Conveyors and Scraper-Securing Element Thereof	Australia	2006-03-24	2006340716					2011-01-19	2006340716
Scrapers for Link Chains of Scraper Chain Conveyors and Scraper-Securing Element Thereof	China	2006-03-24	200680026113.2	2008-07-16	CN101223091A			2011-07-27	200680026113.2
Scrapers for Link Chains of Scraper Chain Conveyors and Scraper-Securing Element Thereof	United States of America	2006-03-24	12/225265	2009-10-29	2009-0266681			2010-08-17	7775342
Scrapers for Link Chains of Scraper Chain Conveyors and Scraper-Securing Element Thereof	Germany (Federal Republic of)	2006-03-24	06723714.9					2010-06-16	502006007247.5
Carriage for Use in Mining Plane or Coal Plane for Underground Mining	China	2007-06-13	200710110400.8	2007-12-19	CN101089364A			2011-08-03	200710110400.8

Device for Milling Rock and Other Materials and Method for Milling Rock or the Like Using Said Device	Russian Federation	2006-01-26	2007132185				2009-06-10	2358104
Device for Milling Rock and Other Materials and Method for Milling Rock or the Like Using Said Device	United States of America	2006-01-26	11/795611	2008-05-22	2008-0116734		2009-12-15	7631942
Device for Milling Rock and Other Materials and Method for Milling Rock or the Like Using Said Device	South Africa	2006-01-26	2007/06150				2008-05-28	2007/06150
Device for Milling Rock and Other Materials and Method for Milling Rock or the Like Using Said Device	Italy	2006-01-26	502010901887022				2010-08-04	EP1841949
Device for Milling Rock and Other Materials and Method for Milling Rock or the Like Using Said Device	Poland	2006-01-26	06706429.5				2010-08-04	EP1841949
Device for Milling Rock and Other Materials and Method for Milling Rock or the Like Using Said Device	Sweden	2006-01-26	06706429.5				2010-08-04	EP1841949
Drive Station for an Underground Plough System and Method for Repairing Recovery Ploughs	Germany (Federal Republic of)	2007-07-02	1020070306468				2016-09-15	1020070306468
Drive Station for an Underground Plough System and Method for Repairing Recovery Ploughs	China	2008-06-20	2008800224560	2010-03-31	CN101688444		2013-07-17	2008800224560
Drive Station for an Underground Plough System and Method for Repairing Recovery Ploughs	Poland	2008-06-20	390172				2016-11-07	223700
Drive Station for an Underground Plough System and Method for Repairing Recovery Ploughs	Russian Federation	2008-06-20	2010103211				2012-10-01	2439320

Drive Station for an Underground Plough System and Method for Repairing Recovery Ploughs	United States of America	2008-06-20	12/665421	2010-12-23	2010-0320828	2012-10-02	8276990
Guide Shoe for a Roller-Type Loader and Wear Inserts for Guide Shoes	Australia	2008-01-16	2008209074			2014-06-12	2008209074
Guide Shoe for a Shearer Loader, and Wear Inserts for Guide Shoes	India	2008-01-16	2422/KOLNP/2009			2018-03-21	294642
Guide Shoe for a Roller-Type Loader and Wear Inserts for Guide Shoes	Russian Federation	2008-01-16	2009131756			2012-06-20	2453699
Guide Shoe for a Roller-Type Loader and Wear Inserts for Guide Shoes	South Africa	2008-01-16	2009/05088			2010-06-30	2009/05088
Guide Shoe for a Roller-Type Loader and Wear Inserts for Guide Shoes	China	2008-01-16	200880002817.5	2009-12-02	CN101595275A	2012-07-04	200880002817.5
Guide Shoe for a Roller-Type Loader and Wear Inserts for Guide Shoes	United States of America	2008-01-16	12/523876	2010-01-28	2010-0019563	2012-10-02	8276991
Guide Shoe for a Roller-Type Loader and Wear Inserts for Guide Shoes	Germany (Federal Republic of)	2008-01-16	08707061.1		EP2115271	2011-09-07	502008004773.5
Guide Shoe for a Roller-Type Loader and Wear Inserts for Guide Shoes	Poland	2008-01-16	08707061.1			2011-09-07	EP2115271
Device for Determining the Cutting Horizon of a Mining Extraction System, and Pan Element Therefor	China	2008-04-17	200880013135.4	2010-03-03	CN101663462A	2012-05-30	200880013135.4
Device for Determining the Cutting Horizon of a Mining Extraction System, and Pan Element Therefor	Germany (Federal Republic of)	2008-04-17	112008000670.9			2016-09-27	112008000670
Device for Determining the Cutting Horizon of a Mining Extraction System, and Pan Element Therefor	Poland	2008-04-17	P389337			2014-08-29	217681

Device for Determining the Cutting Horizon of a Mining Extraction System, and Pan Element Therefor	Russian Federation	2008-04-17	2009143683				2011-06-27	2422635
Carriage for a Recovery Plough	China	2008-10-31	200880114967.5	2010-10-27	CN101874146A		2013-02-13	200880114967.5
Carriage for a Recovery Plough	Germany (Federal Republic of)	2008-10-31	112008002949.0				2016-09-28	112008002949.0
Carriage for a Recovery Plough	Poland	2008-10-31	391787				2016-04-29	221535
Carriage for a Recovery Plough	Russian Federation	2008-10-31	2010122892				2012-12-20	2470154
CARRIAGE FOR A RECOVERY PLOUGH	United States of America	2008-10-31	12/741555	2010-10-21	2010-0263569		2014-01-21	8632134
Method and Apparatus for the Milling Cutting of Materials	Chile	2008-02-29	0634-2008				2012-04-19	48.365
Method and Apparatus for the Milling Cutting of Materials	South Africa	2007-08-30	2009/02146				2010-03-31	2009/02146
Method and Apparatus for the Milling Cutting of Materials	Australia	2007-08-30	2007291529				2013-01-24	2007291529
Method and Apparatus for the Milling Cutting of Materials	Canada	2007-08-30	2661476				2014-11-04	2661476
Method and Apparatus for the Milling Cutting of Materials	China	2007-08-30	200780032313.3	2009-08-19	CN101512101A		2011-09-14	200780032313.3
Method and Apparatus for the Milling Cutting of Materials	Russian Federation	2007-08-30	2009111590				2011-11-10	2433265
METHOD AND APPARATUS FOR THE MILLING CUTTING OF MATERIALS	United States of America	2007-08-30	12/438140	2010-01-07	2010-0001574		2011-03-01	7896445
Method and Apparatus for the Milling Cutting of Materials	Poland	2007-08-30	07802018.7				2012-11-14	EP2057348
Method and Apparatus for the Milling Cutting of Materials	Austria	2007-08-30	07802018.7	2009-05-13	EP2057348		2012-11-14	E584124
Method and Apparatus for the Milling Cutting of Materials	Germany (Federal Republic of)	2007-08-30	07802018.7	2009-05-13	EP2057348		2012-11-14	502007010875.8
Method and Apparatus for the Milling Cutting of Materials	Finland	2007-08-30	07802018.7	2009-05-13	EP2057348		2012-11-14	EP2057348

LINK CHAIN FOR CHAIN CONVEYORS AND HORIZONTAL CHAIN LINKS THEREFOR	United States of America	2009-07-20	13/055308	2011-06-02	2011-0127146	2013-07-02	8474606
Link Chain for Chain Conveyors and Horizontal Chain Links Therefor	Australia	2009-07-20	2009275168			2012-10-11	2009275168
Link Chain for Chain Conveyors and Horizontal Chain Links Therefor	China	2009-07-20	2009801286249	2011-06-22	CN102105372	2014-01-08	200980128624.9
Link Chain for Chain Conveyors and Horizontal Chain Links Therefor	Germany (Federal Republic of)	2009-07-20		2011-04-13	EP2307294	2014-03-12	602009022475.1
Link Chain for Chain Conveyors and Horizontal Chain Links Therefor	Poland	2009-07-20	09786643.8			2014-03-12	EP2307294
Conveyor Pan with Changeable Trough, and a Changeable Trough	Australia	2009-08-28	2009286335			2016-03-23	2009286335
Conveyor Pan with Changeable Trough, and a Changeable Trough	India	2009-08-28	656/KOLNP/2011			2019-09-25	321322
Conveyor Pan with Changeable Trough, and a Changeable Trough	Russian Federation	2009-08-28	2011111713			2012-12-27	2470849
CONVEYOR PAN WITH CHANGEABLE TROUGH, AND A CHANGEABLE TROUGH	United States of America	2009-08-28	13/060074	2011-06-16	2011-0139587	2013-02-05	8365901
Conveyor Pan with Changeable Trough, and a Changeable Trough	Germany (Federal Republic of)	2009-08-28	09787043.0	2011-05-11	EP2318294	2013-05-01	602009015467.2
Conveyor Pan with Changeable Trough, and a Changeable Trough	Poland	2009-08-28	09787043.0			2013-05-01	EP2318294
DRIVE AND TENSIONING UNIT FOR A SCRAPER CHAIN CONVEYOR	United States of America	2009-07-22	13/057656	2011-06-09	2011-0132728	2014-01-14	8627948
Drive and Tensioning Unit for a Scraper Chain Conveyor	Australia	2009-07-22	2009278825			2015-03-19	2009278825

Drive and Tensioning Unit for a Scraper Chain Conveyor	China	2009-07-22	200980128650 .1	2011-06-22	CN102105374	2012-10-03	2009801286 50.1
Drive and Tensioning Unit for a Scraper Chain Conveyor	Germany (Federal Republic of)	2009-07-22	09786675.0	2011-05-18	EP2321204	2012-12-05	6020090117 94.7
Drive and Tensioning Unit for a Scraper Chain Conveyor	Poland	2009-07-22	09786675.0			2012-12-05	EP2321204
RECEPTACLE PLATE AND GATE CONVEYER- CONNECTION LINE PAN	China	2010-11-05	201080051030 .5	2012-10-24	CN102753786A	2015-02-11	2010800510 30.5
RECEPTACLE PLATE AND GATE CONVEYER- CONNECTION LINE PAN	Eurasian Patent Convention	2010-11-05	201290312			2015-11-30	022255
TRANSFER STATION	Germany (Federal Republic of)	2010-11-05	10784349.2	2012-09-19	EP2499336	2014-08-13	5020100076 85.9
TRANSFER STATION	Poland	2010-11-05	10784349.2			2014-08-13	EP2499336
RECEPTACLE PLATE AND GATE CONVEYER- CONNECTION LINE PAN	Russian Federation	2010-11-05	201290312			2015-11-30	022255
Link Chain for Chain Conveyors and Horizontal Chain Links Therefor	Australia	2010-01-04	2010204112			2013-12-12	2010204112
Link Chain for Chain Conveyors and Horizontal Chain Links Therefor	China	2010-01-04	201080003372 .X	2011-10-26	CN102227361A	2014-12-10	2010800033 72.X
Link Chain for Chain Conveyors and Horizontal Chain Links Therefor	Russian Federation	2010-01-04	2011133073			2013-11-27	2499755
Link Chain for Chain Conveyors and Horizontal Chain Links Therefor	South Africa	2010-01-04	2011/04640			2012-03-28	2011/04640
LINK CHAIN FOR CHAIN CONVEYORS AND HORIZONTAL CHAIN LINKS THEREFOR	United States of America	2010-01-04	13/143285	2011-11-10	2011-0272253	2014-01-21	8631930
Link Chain for Chain Conveyors and Horizontal Chain Links Therefor	Germany (Federal Republic of)	2010-01-04	10702738.5	2011-11-16		2014-10-15	6020100195 41.4

Link Chain for Chain Conveyors and Horizontal Chain Links Therefor	Poland	2010-01-04	10702738.5				2014-10-15	EP2385923
Tail Station for a Scraper Chain Conveyor and Chain Wheel Assembly Therefor	Australia	2010-08-02	2010283503				2016-07-14	2010283503
TAIL STATION FOR A SCRAPER CHAIN CONVEYOR AND CHAIN WHEEL ASSEMBLY THEREFOR	United States of America	2010-08-02	13/390307			2012-06-07	2013-07-23	8490779
TAIL STATION FOR A SCRAPER CHAIN CONVEYOR AND CHAIN WHEEL ASSEMBLY THEREFOR	China	2010-08-02	201080032284.2			2012-10-03	2014-10-08	201080032284.2
Tail Station for a Scraper Chain Conveyor and Chain Wheel Assembly Therefor	Germany (Federal Republic of)	2010-08-02	10747945.3			2012-06-20	2014-04-09	502010006620.9
Chain Wheel Arrangement for Mining Machines	Australia	2010-03-01	2010224542				2016-07-14	2010224542
Chain Wheel Arrangement for Mining Machines	China	2010-03-01	201080010344.0			2012-02-01	2015-08-19	201080010344.0
Chain Wheel Arrangement for Mining Machines	Russian Federation	2010-03-01	2011141761				2014-05-05	2520993
CHAIN WHEEL ARRANGEMENT FOR MINING MACHINES	United States of America	2010-03-01	13/255716			2012-01-05	2014-09-30	8844711
Chain Wheel Arrangement for Mining Machines	Germany (Federal Republic of)	2010-03-01	10709283.5			2012-01-25	2013-11-06	602010011482.1
Chain Wheel Arrangement for Mining Machines	Poland	2010-03-01	10709283.5				2013-11-06	EP2408695
SENSOR DEVICE AND METHOD FOR THE GEOELECTRICAL PROSPECTING OF RAW MINERAL DEPOSITS	United States of America	2010-09-03	13/395065			2012-07-19	2015-06-09	9051832
Pan Section	Australia	2009-11-03	2009315335				2012-12-13	2009315335

Pan Section	China	2009-11-03	200980144782.3	2011-10-05	CN102209673A	2013-12-25	200980144782.3
PAN SECTION	United States of America	2009-11-03	13/128535	2011-09-15	2011-0220466	2014-08-05	8794429
Scraper for Scraper Chain Conveyors	Australia	2010-03-05	2010222598			2016-08-11	2010222598
SCRAPER FOR SCRAPER CHAIN CONVEYORS	United States of America	2010-03-05	13/255313	2011-12-29	2011-0315519	2014-03-04	8662287
Scraper for Scraper Chain Conveyors	Poland	2010-03-05	10710650.2			2014-12-24	EP2406158
Scraper for Scraper Chain Conveyors	Germany (Federal Republic of)	2010-03-05	10710650.2			2014-12-24	502010008568.8
Scraper for Scraper Chain Conveyors	China	2015-08-13	201510498035.7	2016-01-13	CN105236077A	2018-06-15	201510498035.7
Upper-Strand Well for a Trough Pan and Trough Pan Having Such an Upper-Strand Well	China	2010-06-07	201080025512.3	2012-05-16	CN102459036A	2015-04-15	201080025512.3
UPPER-STRAND WELL FOR A TROUGH PAN AND TROUGH PAN HAVING SUCH AN UPPER-STRAND WELL	United States of America	2010-06-07	13/377222	2012-04-05	2012-0080289	2014-07-22	8783445
Upper-Strand Well for a Trough Pan and Trough Pan Having Such an Upper-Strand Well	Germany (Federal Republic of)	2010-06-07	10735089.4	2012-04-18	EP2440480	2013-10-02	502010004939.8
Upper-Strand Well for a Trough Pan and Trough Pan Having Such an Upper-Strand Well	Poland	2010-06-07	10735089.4			2013-10-02	EP2440480
Hydraulic Switching Mechanism for Mobile Hydraulics, Mobile Hydraulic Machine and Valve Unit	Chile	2010-05-11	2927-2011			2016-06-09	53.016
HYDRAULIC SWITCHING MECHANISM FOR MOBILE HYDRAULICS, MOBILE HYDRAULIC	United States of America	2010-05-11	13/320980	2013-02-21	2013-0042935	2015-12-08	9206821

MACHINE AND VALVE UNIT												
Rack and Pinion Arrangement for a Mining Extraction Machine	China	2010-07-16	201080029170.2	2012-07-11	CN102575517A	2014-08-27	201080029170.2					
RACK AND PINION ARRANGEMENT FOR A MINING EXTRACTION MACHINE AND RACK AND PINION ROD THEREFOR	United States of America	2010-07-16	13/384622	2012-05-10	2012-0111133	2015-02-03	8944519					
Rack and Pinion Arrangement for a Mining Extraction Machine	Poland	2010-07-16	10742587.8			2014-05-07	EP2456953					
SHIELD CANOPY FOR A SHIELD-TYPE SUPPORT	United States of America	2010-11-16	13/510471	2012-09-13	2012-0230775	2015-08-18	9109445					
Feed System for an Underground Winning Machine, Rack Bar and Drive Sprocket Therefor	Australia	2010-10-06	2010304728			2016-10-27	2010304728					
Feed System for an Underground Winning Machine, Rack Bar and Drive Sprocket Therefor	China	2010-10-06	201080045297.3	2012-07-11	CN102575518A	2014-11-26	201080045297.3					
FEED SYSTEM FOR AN UNDERGROUND WINNING MACHINE, RACK BAR AND DRIVE SPROCKET THEREFOR	United States of America	2010-10-06	13/500477	2012-08-09	2012-0198950	2016-03-01	9273552					
Feed System for an Underground Winning Machine, Rack Bar and Drive Sprocket Therefor	Germany (Federal Republic of)	2010-10-06	10773401.4			2016-11-16	602010038076.9					
Feed System for an Underground Winning Machine, Rack Bar and Drive Sprocket Therefor	Poland	2010-10-06	10773401.4			2016-11-16	EP2486238					
Plug-In Module for	Australia	2010-12-14	2010331849			2016-08-11	2010331849					

Appliance and Network Interface for It										
Intrinsically Safe Connection Unit with a Network Interface, Intrinsically Safe Appliance and Network Interface for It	Poland	2011-01-28	11707223.1					2017-01-18	EP2531698	
Method for Determining the Position or Location of Plant Components in Mining Extracting Plants and Extracting Plant	Australia	2011-02-18	2011216901					2015-07-30	2011216901	
METHOD FOR DETERMINING THE POSITION OR LOCATION OF PLANT COMPONENTS IN MINING EXTRACTING PLANTS AND EXTRACTING PLANT	United States of America	2011-02-18	13/579903				2012-12-20	2012-0319453	8998343	
Method for Determining the Position or Location of Plant Components in Mining Extracting Plants and Extracting Plant	Germany (Federal Republic of)	2011-02-18	11710879.5					2017-05-31	6020110383 15.9	
Method for Determining the Position or Location of Plant Components in Mining Extracting Plants and Extracting Plant	Poland	2011-02-18	11710879.5					2017-05-31	EP2536918	
CONNECTING DEVICE FOR A TROUGH PAN OF EXTRACTION DEVICES, TROUGH PAN AND ATTACHMENT THEREFOR	United States of America	2011-12-02	13/990362				2013-11-21	2013-0306438	9096378	
DEVICE MACHINING MATERIALS BY MILLING OR DRILLING, AND METHOD THEREFOR	Germany (Federal Republic of)	2012-09-25	12835849.6				2014-08-06	2018-12-19	6020120549 61.0	

DEVICE MACHINING MATERIALS BY MILLING OR DRILLING, AND METHOD THEREFOR	Poland	2012-09-25	12835849.6	2014-08-06	EP2761135	2018-12-19	EP2761135
A Method and System for Increasing the Operational Safety of Mobile Machines in Aboveground or Underground Mining Operations for the Extraction of Minerals by Utilizing the RFID Technology	Australia	2012-10-26	2012327464			2017-06-01	2012327464
A Method and System for Increasing the Operational Safety of Mobile Machines in Aboveground or Underground Mining Operations for the Extraction of Minerals by Utilizing the RFID Technology	China	2012-10-26	201280052617.7	2014-07-02	CN103907031A	2016-11-23	201280052617.7
METHOD AND SYSTEM FOR INCREASING THE OPERATIONAL SAFETY OF MOBILE MACHINES IN ABOVEGROUND OR UNDERGROUND MINING OPERATIONS FOR THE EXTRACTION OF MINERALS BY UTILIZING THE RFID TECHNOLOGY	United States of America	2012-10-26	14/353257	2014-09-11	2014-0253292	2017-04-18	9626538
PLUG-IN CONNECTION WITH RETAINING ELEMENT AND RETAINING ELEMENT FOR THIS PURPOSE	Australia	2012-11-30	2012351297			2017-08-03	2012351297
CONTROL METHOD FOR LONGWALL SHEARER	China	2014-05-09	201480027258.9	2016-03-09	CN105392962A	2018-10-16	201480027258.9
CONTROL METHOD FOR LONGWALL SHEARER	United States of America	2014-05-09	14/889336	2016-05-05	2016-0123145	2017-11-07	9810066

CONTROL METHOD FOR LONGWALL SHEARER	Germany (Federal Republic of)	2013-05-13	13167547.2			2019-02-27	6020130512 95.7
CONTROL METHOD FOR LONGWALL SHEARER	Poland	2013-05-13	13167547.2			2019-02-27	EP2803818
CONTROL METHOD FOR LONGWALL SHEARER	Turkey	2013-05-13	13167547.2			2019-02-27	TR20190422 6
Mining Plow	China	2013-03-15	201380017422 .3	2014-12-31	CN104254668A	2017-02-22	2013800174 22.3
Mining Plow	Germany (Federal Republic of)	2013-03-15		2015-02-04	EP2831375	2016-09-28	6020130121 41.9
Mining Plow	Poland	2013-03-15	13710305.7	2015-02-04	EP2831375	2016-09-28	EP2831375
SUPPORT STRUCTURE FOR DRIVE OR RETURN STATIONS USED IN UNDERGROUND MINING	Eurasian Patent Convention	2013-02-26	201400961			2017-01-31	025725
SUPPORT STRUCTURE FOR DRIVE OR RETURN STATIONS USED IN UNDERGROUND MINING	China	2013-02-26	201380010964 .8		CN104136714B	2017-02-22	2013800109 64.8
SUPPORT STRUCTURE FOR DRIVE OR RETURN STATIONS USED IN UNDERGROUND MINING	Poland	2013-02-26	13708345.7	2015-01-07	EP2820244	2015-11-18	EP2820244
SUPPORT STRUCTURE FOR DRIVE OR RETURN STATIONS USED IN UNDERGROUND MINING	Germany (Federal Republic of)	2013-02-26	13708345.7	2015-01-07		2015-11-18	6020130038 99.6
SUPPORT STRUCTURE FOR DRIVE OR RETURN STATIONS USED IN UNDERGROUND MINING	Russian Federation	2013-02-26	201400961			2017-01-31	025725
Scraper for Chain Scraper Conveyors	Australia	2013-05-23	2013270980			2017-05-25	2013270980
Scraper for Chain Scraper Conveyors	China	2013-05-23	201380030085 .1	2015-02-11	CN104349998A	2017-03-22	2013800300 85.1
Scraper for Chain Scraper Conveyors	United States of America	2013-05-23	14/406410	2015-05-28	2015-0144464	2016-03-15	9284124

Transmission, in Particular for Drive Systems of Construction Machines and Mining Machines	Australia	2013-04-23	2013252097				2017-06-01	2013252097
Transmission, in Particular for Drive Systems of Construction Machines and Mining Machines	China	2013-04-23	201380021722.9	2014-12-24	CN1014246313A		2017-04-19	201380021722.9
Transmission, in Particular for Drive Systems of Construction Machines and Mining Machines	Poland	2013-04-23	P.409884				2018-01-15	227735
TRANSMISSION, IN PARTICULAR FOR DRIVE SYSTEMS OF CONSTRUCTION MACHINES AND MINING MACHINES	United States of America	2013-04-23	14/397362	2015-04-02	2015-0094187		2017-01-10	9541187
MOBILE MINING	Chile	2013-08-13	304-2015				2019-05-10	57.854
DRIVE CONNECTION WITH INTEGRATED CHAIN TENSIONING APPARATUS FOR FACE CONVEYORS	China	2014-04-24	201480026550.9	2015-12-30	CN105209358A		2017-07-21	201480026550.9
DRIVE CONNECTION WITH INTEGRATED CHAIN TENSIONING APPARATUS FOR FACE CONVEYORS	United States of America	2014-04-24	14/890250	2016-03-24	2016-0083191		2016-11-22	9499347
DRIVE CONNECTION WITH INTEGRATED CHAIN TENSIONING APPARATUS FOR FACE CONVEYORS	Poland	2013-05-13	13167530.8	2014-11-19	EP2803605		2015-09-16	EP2803605
Turnaround Box with Supply Unit for CST Gears	Germany (Federal Republic of)	2012-09-19	202012103587.1				2013-12-20	202012103587.1
Drive Unit for Chain Drives in Mining	Australia	2013-09-12	2013320649				2018-07-19	2013320649

Drive Unit for Chain Drives in Mining	China	2013-09-12	201380048577 .3	2015-06-17	CN104718347A	2017-05-03	2013800485 77.3
DRIVE SYSTEM -- Prosecution managed by OC for Yancoal	Australia	2012-05-09	2012253219			2016-11-24	2012253219
COARSE CRUSHER	Germany (Federal Republic of)	2013-03-15	202013002583 .2			2013-03-27	2020130025 83.2
LUMPCRUSHER FOR A SCRAPE CHAIN CONVEYOR	Australia	2013-09-12	2013382379			2018-06-07	2013382379
LUMPCRUSHER FOR A SCRAPE CHAIN CONVEYOR	China	2013-09-12	201380074492 .2	2015-12-23	CN105189926A	2017-11-28	2013800744 92.2
LUMPCRUSHER FOR A SCRAPE CHAIN CONVEYOR	Russian Federation	2013-09-12	2015141121			2018-01-29	2642906
MINING PLOW WITH PUSH ROD	China	2014-04-17	201480023851 .6	2015-12-09	CN105143602A	2018-02-06	2014800238 51.6
MINING PLOW WITH PUSH ROD	Russian Federation	2014-04-17	2015147870	2017-05-16	2015147870	2018-05-23	2655061
MINING PLOW WITH PUSH ROD	Germany (Federal Republic of)	2013-04-30	13165990.6	2014-11-05	EP2799662	2018-07-25	6020130407 23.1
MINING PLOW WITH PUSH ROD	Poland	2013-04-30	13165990.6	2014-11-05	EP2799662	2018-07-25	EP2799662
FORCE MEASURING UNIT AND SYSTEM FOR MEASURING CHAIN FORCES	China	2014-11-25	201480065631 .X	2016-07-20	CN105793685A	2019-09-13	ZL20148006 5631.X
FORCE MEASURING UNIT AND SYSTEM FOR MEASURING CHAIN FORCES	United States of America	2014-11-25	15/101210	2016-10-20	2016-0304286	2017-11-07	9809389
FORCE MEASURING UNIT AND SYSTEM FOR MEASURING CHAIN FORCES	Germany (Federal Republic of)	2013-12-09	13196300.1	2015-06-10	EP2881720	2019-03-06	6020130517 61.4

FORCE MEASURING UNIT AND SYSTEM FOR MEASURING CHAIN FORCES	Poland	2013-12-09	13196300.1	2015-06-10	EP2881720	2019-03-06	EP2881720
SLEEVE HOLDER FOR A HYDRAULIC CYLINDER	Australia	2015-03-27	2015245617			2019-08-28	2015245617
SLEEVE HOLDER FOR A HYDRAULIC CYLINDER	China	2015-03-27	201580017004.3	2016-11-16	CN106133336A	2018-09-28	201580017004.3
SLEEVE HOLDER FOR A HYDRAULIC CYLINDER	United States of America	2015-03-27	15/300581	2017-04-20	2017-0108016	2019-08-20	10385888
SHEARER LOADER FOR UNDERGROUND MINING WITH BEARING UNITS WITHIN MAIN FRAME	China	2015-01-22	201580006873.6	2016-09-14	CN105940188A	2018-09-18	201580006873.6
SHEARER LOADER FOR UNDERGROUND MINING WITH BEARING UNITS WITHIN MAIN FRAME	Germany (Federal Republic of)	2014-02-07	14154360.3	2015-08-12	EP2905421	2017-05-24	602014010045.7
GUIDE PIECE FOR AN EXTRACTION OR COAL PLOUGH	China	2015-03-12	201580012601.7	2016-12-28	CN106257993A	2021-10-08	ZL201580012601.7
GUIDE PIECE FOR AN EXTRACTION OR COAL PLOUGH	Germany (Federal Republic of)	2015-03-12	15709844.3	2017-01-18	EP3117077	2018-12-26	602015022226.1
GUIDE PIECE FOR AN EXTRACTION OR COAL PLOUGH	Poland	2015-03-12	15709844.3	2017-01-18	EP3117077	2018-12-26	EP3117077
SENSING DEVICE FOR A DIGITAL LINEAR POSITION SENSOR	Australia	2015-06-17	2015276608			2020-04-30	2015276608
SENSING DEVICE FOR A DIGITAL LINEAR POSITION SENSOR	China	2015-06-17	201580031321.0	2017-02-22	CN106461420A		
SENSING DEVICE FOR A DIGITAL LINEAR POSITION SENSOR	United States of America	2015-06-17	15/318904	2017-05-18	2017-0138764	2018-04-03	9933282
SENSING DEVICE FOR A DIGITAL LINEAR POSITION SENSOR	Germany (Federal Republic of)	2014-06-18	14173050.7	2015-12-23	EP2957872	2018-04-04	602014023212.4

SENSING DEVICE FOR A DIGITAL LINEAR POSITION SENSOR	Poland	2014-06-18	14173050.7	2015-12-23	EP2957872	2018-04-04	EP2957872
SENSING DEVICE FOR A DIGITAL LINEAR POSITION SENSOR	China	2015-06-17	202210176613.5	2022-05-24	CN114526759A		
SCRAPING ELEMENTS FOR DRIVE UNITS OF UNDERGROUND MINING APPLICATIONS	Australia	2015-07-20	2015295871			2021-01-07	2015295871
SCRAPING ELEMENTS FOR DRIVE UNITS OF UNDERGROUND MINING APPLICATIONS	China	2015-07-20	201580039845.4	2017-05-10	CN106660708A	2019-07-05	201580039845.4
SCRAPING ELEMENTS FOR DRIVE UNITS OF UNDERGROUND MINING APPLICATIONS	United States of America	2015-07-20	15/324172	2017-07-13	2017-0197793	2019-08-27	10392195
SCRAPING ELEMENTS FOR DRIVE UNITS OF UNDERGROUND MINING APPLICATIONS	Germany (Federal Republic of)	2014-07-31	14179411.5			2020-09-30	602014070679.7
SCRAPING ELEMENTS FOR DRIVE UNITS OF UNDERGROUND MINING APPLICATIONS	Poland	2014-07-31	14179411.5			2020-09-30	2979997
CONTINUOUS CONVEYOR FOR TRANSPORTING HEAVY BULK MATERIAL OR ARTICLES	Australia	2012-05-03	2012292578			2017-06-22	2012292578
CONTINUOUS CONVEYOR FOR TRANSPORTING HEAVY BULK MATERIAL OR ARTICLES	Eurasian Patent Convention	2012-05-03	201400209			2017-11-30	028453
CONTINUOUS CONVEYOR FOR TRANSPORTING HEAVY BULK MATERIAL OR ARTICLES	Ukraine	2012-05-03	201402310			2015-09-25	109733

ARTICLES										
CONTINUOUS CONVEYOR FOR TRANSPORTING HEAVY BULK MATERIAL OR UNIT LOADS	United States of America	2012-05-03	14/175326	2014-06-05	2014-0151197	2016-12-27	9527670			
CONTINUOUS CONVEYOR FOR TRANSPORTING HEAVY BULK MATERIAL OR UNIT LOADS	United States of America	2016-10-05	15/285580	2017-01-26	2017-0022013	2020-03-17	10589936			
CONTINUOUS CONVEYOR FOR TRANSPORTING HEAVY BULK MATERIAL OR ARTICLES	Russian Federation	2012-05-03	201400209			2017-11-30	028453			
FLOW GUIDE ASSEMBLY FOR FLOW GUIDES	China	2015-04-01	201580051743 .4		CN106795761B	2018-10-16	2015800517 43.4			
FLOW GUIDE ASSEMBLY FOR FLOW GUIDES	Russian Federation	2015-04-01	2017112039			2018-01-16	2641151			
FLOW GUIDE ASSEMBLY FOR FLOW GUIDES	United States of America	2015-04-01	15/513872	2017-10-12	2017-0292378	2019-12-17	10508540			
FLOW GUIDE ASSEMBLY FOR FLOW GUIDES	Germany (Federal Republic of)	2014-09-25	14186374.6	2016-03-30	EP3000962	2017-06-14	6020140106 99.4			
FLOW GUIDE ASSEMBLY FOR FLOW GUIDES	Poland	2014-09-25	14186374.6	2016-03-30	EP3000962	2017-06-14	EP3000962			
MILLING DEVICE	Canada	2016-02-12	2976342							
MILLING DEVICE	Russian Federation	2016-02-12	2017130583	2019-02-28	2017130583	2019-11-25	2707215			
HYDRAULIC ASSEMBLY FOR A MINING SYSTEM	Australia	2016-03-04	2016201421			2021-01-28	2016201421			
HYDRAULIC ASSEMBLY FOR A MINING SYSTEM	United States of America	2016-03-09	15/065267	2016-09-15	2016-0265685	2018-05-29	9982799			
UNCOMMANDED STEERING DETECTION	United States of America	2015-06-30	14/755634	2017-01-05	2017-0001663	2017-02-07	9561820			
FLIGHT BAR-CLAMP- CHAIN LINK	Australia	2016-12-09	2016365847			2019-08-22	2016365847			

SYSTEM AND METHOD FOR MONITORING FAULT CONDITIONS IN A PAN LINE OF A LONGWALL MINING SYSTEM	China	2019-07-24	201910669458.9	2020-02-21	CN110821557A		
SYSTEM AND METHOD FOR MONITORING FAULT CONDITIONS IN A PAN LINE OF A LONGWALL MINING SYSTEM	United States of America	2019-07-24	16/521175	2020-02-13	2020-0049533	2021-08-10	11085798
CABLE HANDLING SYSTEM FOR LONGWALL MINING MACHINES	Australia	2019-07-12	2019205026				
CABLE HANDLING SYSTEM FOR LONGWALL MINING MACHINES	China	2019-07-15	201910634878.3	2020-02-04	CN110745644A		
CABLE HANDLING SYSTEM FOR LONGWALL MINING MACHINES	United States of America	2019-07-18	16/515687	2020-01-23	2020-0024943	2021-10-19	11149546
SHEARING SYSTEM FOR LONGWALL MINING	Australia	2019-07-25	2019208222			2021-03-18	2019208222
SHEARING SYSTEM FOR LONGWALL MINING	China	2019-07-25	201910676180.8	2020-02-21	CN110821490A		
SHEARING SYSTEM FOR LONGWALL MINING	United States of America	2019-07-23	16/519609	2020-02-13	2020-0049004	2020-11-24	10844713
SELF-ADVANCING ROOF SUPPORT FOR A LONGWALL MINING SYSTEM	United States of America	2019-07-24	16/521254	2020-02-13	2020-0049006	2020-09-08	10767481
SELF-ADVANCING ROOF SUPPORT FOR A LONGWALL MINING SYSTEM	Australia	2019-07-25	2019208226				
SELF-ADVANCING ROOF SUPPORT FOR A LONGWALL MINING SYSTEM	China	2019-07-25	201910676608.9	2020-02-21	CN110821542A		

Method and Device for Monitoring Operation of a Mining Machine Unit	United Kingdom	2019-03-06	1902978.4	2020-09-09	2581983	2021-07-21	2581983
METHOD AND DEVICE FOR MONITORING OPERATION OF A MINING MACHINE UNIT	Australia	2020-03-02	2020230760				
METHOD AND DEVICE FOR MONITORING OPERATION OF A MINING MACHINE UNIT	China	2020-03-02	202080017583.2	2021-10-15	CN113508216A		
METHOD AND DEVICE FOR MONITORING OPERATION OF A MINING MACHINE UNIT	European Patent	2020-03-02	20710423.3	2022-01-12	3935263		
METHOD AND DEVICE FOR MONITORING OPERATION OF A MINING MACHINE UNIT	Russian Federation	2020-03-02	2021126447				
METHOD AND DEVICE FOR MONITORING OPERATION OF A MINING MACHINE UNIT	United States of America	2020-03-02	17/436172	2022-05-05	2022-0136390		
METHOD AND APPARATUS FOR MONITORING SPROCKET WEAR, E.G. IN A MINING CONVEYOR	United Kingdom	2019-01-15	1900573.5	2020-07-29	2580610	2021-08-11	2580610
METHOD AND APPARATUS FOR MONITORING SPROCKET WEAR, E.G. IN A MINING CONVEYOR	Australia	2020-01-14	2020208723				
METHOD AND APPARATUS FOR MONITORING SPROCKET WEAR, E.G. IN A MINING CONVEYOR	China	2020-01-14	202080008668.4	2021-08-24	CN113302419A		

CONVEYOR										
METHOD AND APPARATUS FOR MONITORING SPROCKET WEAR, E.G. IN A MINING CONVEYOR	European Patent	2020-01-14	20701251.9	2021-12-15	3921559					
METHOD AND APPARATUS FOR MONITORING SPROCKET WEAR, E.G. IN A MINING CONVEYOR	Russian Federation	2020-01-14	2021120917							
METHOD AND APPARATUS FOR MONITORING SPROCKET WEAR, E.G. IN A MINING CONVEYOR	United States of America	2020-01-14	17/423404	2022-03-03	2022-0063923					
ELECTRIC TERMINAL ASSEMBLY OF A DRIVE UNIT FOR USE IN A MINING MACHINE 19-0384-72261 & 19-0387-72264 combined with this matter	United Kingdom	2019-11-26	1917196.6	2021-06-02	2589332					
ELECTRIC TERMINAL ASSEMBLY OF A DRIVE UNIT FOR USE IN A MINING MACHINE	Australia	2020-11-17	2020391039							
ELECTRIC TERMINAL ASSEMBLY OF A DRIVE UNIT FOR USE IN A MINING MACHINE	China	2020-11-17	202080081133.X	2022-07-08	CN114731090A					
ELECTRIC TERMINAL ASSEMBLY OF A DRIVE UNIT FOR USE IN A MINING MACHINE	European Patent	2020-11-17	20811238.3							
ELECTRIC TERMINAL ASSEMBLY OF A DRIVE UNIT FOR USE IN A MINING MACHINE	United States of America	2020-11-17	17/780295							

Liquid-Tight Drive Connection for Engine and Transmission Coupling	Australia	2020-09-21	2020354261				
Liquid-Tight Drive Connection for Engine and Transmission Coupling	China	2020-09-21	202080067988.7	2022-05-31	CN114568029A		
Liquid-Tight Drive Connection for Engine and Transmission Coupling	United States of America	2020-09-21	17/764433				
ROTATION ANGLE SENSING AND ADVANCED DIAGNOSTICS	United States of America	2020-02-25	16/800406	2021-08-26	2021-0262334	2022-01-25	11230912
Elastomer-mounted split ring	United Kingdom	2020-08-12	2012541.5	2022-04-13	2599623		
Elastomer-Mounted Split Ring	Patent Cooperation Treaty	2021-08-04	PCT/EP2021/025299	2022-02-17	WO/2022/033720		
Liner sheet, replacement liner, conveyor pan, conveyor, and liner replacement method	United States of America	2022-03-15	17/654836				

