

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

Assignment ID: PATI329971

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	PATENT SECURITY AGREEMENT
CONVEYING PARTY DATA	
Name	Execution Date
EM Resources LLC	06/20/2024
RECEIVING PARTY DATA	
Company Name:	Mizuho Bank, Ltd.
Street Address:	1271 Avenue of the Americas
Internal Address:	3rd Floor
City:	New York
State/Country:	NEW YORK
Postal Code:	10020
PROPERTY NUMBERS Total: 29	
Property Type	Number
Application Number:	16975547
Application Number:	18241365
Patent Number:	8617308
Patent Number:	8795428
Patent Number:	8617438
Patent Number:	9023149
Patent Number:	8747549
Patent Number:	9932457
Patent Number:	9752015
Patent Number:	11795104
Patent Number:	11753338
Patent Number:	7879926
Patent Number:	11174372
Patent Number:	9651497
Patent Number:	7223375
Patent Number:	7691350
Patent Number:	7306200
Patent Number:	10611684
Patent Number:	7658796

Property Type	Number
Patent Number:	7641878
Patent Number:	8846776
Patent Number:	7780934
Patent Number:	7670424
Patent Number:	10941076
Patent Number:	7703403
Patent Number:	7867462
Patent Number:	7329397
Patent Number:	7407546
Patent Number:	9944063

CORRESPONDENCE DATA

Fax Number: 2122944700

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 2122946635

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Address Line 1: Winton & Strawn LLP

Address Line 2: 101 California Street

Address Line 4: San Francisco, CALIFORNIA 94111

ATTORNEY DOCKET NUMBER:	200997.22 PSA
NAME OF SUBMITTER:	Deomattie Kumar
SIGNATURE:	Deomattie Kumar
DATE SIGNED:	06/28/2024

Total Attachments: 7

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PATENT SECURITY AGREEMENT

This **PATENT SECURITY AGREEMENT**, dated as of June 20, 2024 (as amended, restated, amended and restated, supplemented and/or otherwise modified from time to time, this “**Patent Security Agreement**”), is made by EM Resources LLC (the “**Grantor**”) in favor of Mizuho Bank, Ltd., as Agent for the Secured Parties (in such capacity and together with its successors and permitted assigns, the “**Agent**”).

WHEREAS, the Grantor is party to a Guarantee and Collateral Agreement, dated as of June 20, 2024 (as amended, restated, amended and restated, supplemented and/or otherwise modified from time to time, the “**Guarantee and Collateral Agreement**”), between the Grantor, the other grantors party thereto and the Agent, pursuant to which the Grantor granted to the Agent for the benefit of the Secured Parties a security interest in the Patent Collateral (as defined below) and is required to execute and deliver this Agreement.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Grantor hereby agrees with the Agent as follows:

SECTION 1. DEFINED TERMS

Unless otherwise defined herein, terms defined in the Guarantee and Collateral Agreement and used herein have the meanings given to them (including by reference) in the Guarantee and Collateral Agreement.

SECTION 2. GRANT OF SECURITY INTEREST

The Grantor, as security for the payment and performance in full of the Secured Obligations of the Grantor (including, if the Grantor is a Subsidiary Guarantor, the Secured Obligations of the Grantor arising under the Guarantee), hereby pledges to the Agent, for the benefit of the Secured Parties, and hereby grants to the Agent, for the benefit of the Secured Parties, a security interest in all right, title or interest of the Grantor in or to any and all of the following assets and properties now owned or at any time hereafter owned by the Grantor (collectively, the “**Patent Collateral**”):

(i) all United States patents and patent applications, including any listed in Schedule A hereto, and all reissues, continuations, divisionals, continuations-in-part, renewals or extensions thereof;

(ii) the right to sue at law or in equity and recover for any past, present or future infringement or other violation thereof; and

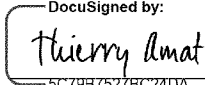
(iii) to the extent not otherwise included, all Proceeds, products, accessions, rents and profits of any and all of the foregoing;

provided, however, that, notwithstanding anything to the contrary in this Patent Security Agreement, (x) this Patent Security Agreement shall not constitute a grant of a security interest in (nor shall any pledge, grant or security interest attach to) any Excluded Assets, and (y) the Patent Collateral shall not include any Excluded Assets.

SECTION 3. SECURITY AGREEMENT


IN WITNESS WHEREOF, the Grantor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

EM RESOURCES LLC

By:  DocuSigned by:
Name: Thierry Amat
Title: Chief Financial Officer

MIZUHO BANK, LTD.,

as Agent



By: _____

Name: Donna DeMagistris

Title: Managing Director

SCHEDULE A
to
PATENT SECURITY AGREEMENT
PATENTS AND PATENT APPLICATIONS

Title	Application Number Filing Date	Patent Number Grant Date
FLY ASH-BASED CEMENTITIOUS MIXTURE	13173794 6/30/2011	8617308 12/31/2013
AERATED INORGANIC POLYMER COMPOSITIONS AND METHODS OF MAKING SAME	13646060 10/5/2012	8795428 8/5/2014
FLY ASH-BASED CEMENTITIOUS MIXTURE	13914758 6/11/2013	8617438 12/31/2013
FLY ASH-BASED CEMENTITIOUS MIXTURE	14087753 11/22/2013	9023149 5/5/2015
FLY ASH-BASED CEMENTITIOUS MIXTURE	14087809 11/22/2013	8747549 6/10/2014
COMPOSITES FORMED FROM AN ABSORPTIVE FILLER AND A POLYURETHANE	14355559 4/30/2014	9932457 4/3/2018
FILLED POLYMERIC COMPOSITES INCLUDING SHORT LENGTH FIBERS	14889094 11/4/2015	9752015 9/5/2017
BUILDING PRODUCTS HAVING SMOOTH SURFACE TOPOGRAPHY	16975547 8/25/2020	20200399177 12/24/2020
AGGREGATE MATERIALS AND METHODS OF PREPARATION THEREOF	17270278 2/22/2021	11795104 10/24/2023
METHODS AND SYSTEMS FOR CONTROLLING CARBON BURN OUT	17436310 9/03/2021	11753338 9/12/2023
METHODS AND SYSTEMS FOR CONTROLLING CARBON BURN OUT	18241365 9/01/2023	20230406766 12/21/2023
METHOD AND COMPOSITION FOR CONTROLLING THE VISCOSITY OF LATEX COMPOSITIONS THAT INCLUDE FLY ASH	11567473 12/6/2006	7879926 2/1/2011
HIGHLY-FILLED POLYURETHANE COMPOSITES WITH NON-SILANE TREATED GLASS FIBERS	16490973 9/4/2019	11174372 11/16/2011

Title	Application Number Filing Date	Patent Number Grant Date
METHOD AND DEVICE TO DETERMINE ADSORPTION CAPACITY FOR AIR ENTRAINING AGENTS	15027537 4/6/2016	9651497 5/16/2017
EMISSION CONTROL SYSTEMS AND METHODS THEREOF	11474794 6/26/2006	7223375 5/29/2007
METHOD OF REMOVING AMMONIA FROM FLY ASH AND FLY ASH COMPOSITION PRODUCED THEREBY	12017830 01/22/2008	7691350 4/6/2010
CONTROLLED RATE FEEDER SYSTEMS FOR FINE PARTICLE SOLIDS AND METHODS THEREOF	11136776 5/25/2005	7306200 12/11/2007
RECOVERY AND BENEFICIATION OF POZZOLAN DEPOSITS FOR ENHANCED PERFORMANCE IN CONCRETE	15751100 2/7/2018	10611684 4/7/2020
CEMENTITIOUS MIXTURES AND METHODS OF USE THEREOF	10557756 11/18/2005	7658796 2/9/2010
FLY ASH BENEFICIATION SYSTEMS WITH SULFUR REMOVAL AND METHODS THEREOF	11358575 2/21/2006	7641878 1/5/2010
FILLED POLYURETHANE COMPOSITES AND METHODS OF MAKING SAME	12855380 8/12/2010	8846776 9/30/2014
METHOD AND SYSTEM FOR REDUCING AMMONIA SLIP AFTER SELECTIVE REDUCTION OF NOX	11662035 3/23/2007	7780934 8/24/2010
METHODS FOR RECLAIMING AND BENEFICIATING FLY ASH PARTICLES AND SYSTEMS THEREOF	11655344 1/19/2007	7670424 3/2/2010
USE OF SACRIFICIAL AGENTS IN MANUFACTURE OF GYPSUM WALLBOARD	16751397 1/24/2020	10941076 3/9/2021
SYSTEM AND METHOD FOR RECOMPOSING AMMONIA FROM FLY ASH	11654332 1/17/2007	7703403 4/27/2010
COAL COMBUSTION SYSTEMS WITH EMISSIONS CONTROL AND FLY ASH BENEFICIATION AND METHODS THEREOF	11526426 9/25/2006	7867462 1/11/2011

Title	Application Number Filing Date	Patent Number Grant Date
METHOD OF REMOVING AMMONIA FROM FLY ASH AND FLY ASH COMPOSITION PRODUCED THEREBY	11218379 9/2/2005	7329397 3/12/2008
METHOD OF REMOVING AMMONIA FROM FLY ASH AND FLY ASH COMPOSITION PRODUCED THEREBY	11970431 1/7/2008	7407546 8/5/2008
METHOD OF PRODUCING REINFORCED SUBSTRATE	15161921 5/23/2016	9944063 4/17/2018

The security interest granted pursuant to this Agreement is granted in conjunction with the security interest granted to the Agent for the Secured Parties pursuant to the Guarantee and Collateral Agreement, and the Grantor hereby acknowledges and affirms that the rights and remedies of the Agent with respect to the security interest in the Patent Collateral made and granted hereby are more fully set forth in the Guarantee and Collateral Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Agreement is deemed to conflict with the Guarantee and Collateral Agreement, the provisions of the Guarantee and Collateral Agreement shall control.

SECTION 4. RECORDATION

The Grantor hereby authorizes and requests that the USPTO record this Patent Security Agreement.

SECTION 5. TERMINATION

This Patent Security Agreement shall terminate, and the lien on and security interest in the Patent Collateral shall be automatically released, upon the termination of all Commitments, the Payment in Full of all Secured Obligations (other than in respect of Secured Bank Product Obligations and contingent indemnification obligations not yet due and owing) and the expiration or termination of all Letters of Credit (or any L/C Exposure has been cash collateralized, backstopped or deemed reissued under another agreement, in each case, in a manner reasonably satisfactory to the applicable Issuing Bank).

SECTION 6. GOVERNING LAW

THIS PATENT SECURITY AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

SECTION 7. COUNTERPARTS

This Patent Security Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

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