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3 SHEET

(Rev. 6-93)

OMB No. 0651-0011 (exp. 4/94)

Patent and Trademark Office

To the Honorable Commissioner

Attached original documents or copy thereof.

1. Name of conveying party(ies):

Armstrong World Industries, Inc. (a Pennsylvania corporation)
2500 Columbia Avenue
Lancaster, Pennsylvania 17603

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies)

Name: Orion Zweiundvierzigste Beteiligungsgesellschaft
mbH (a German Corporation)

Street Address: Senckenberganlage 20-22
60325 Frankfurt am Main
GERMANY

Additional name(s) & address(es) attached? ☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other:

Execution Date:

4. Application number(s) or patent number(s): SEE ATTACHED EXHIBIT "A"

If this document is being filed together with a new application, the execution date of the application is:

A. Patent application No.(s)

B. Patent No.(s)

Additional numbers attached? ☒ Yes ☐ No

5. Name and address of party to whom correspondence concerning document should be mailed:

WOMBLE CARLYLE SANDRIDGE & RICE, PLLC
One Atlantic Center
1201 West Peachtree Street, Suite 3500
Atlanta, GA 30309

6. Total number of applications/patents involved: [17]

7. Total fee (37 CFR 3.41) \$ 680.00

☒ Enclosed
☐ Authorized to be charged to deposit account

8. Deposit Account Number:

09-0528

(Attach duplicate copy of this page if paying by Deposit Account)

08/10/2001 LMUELLER 00000285 4454250

01 EC:581 680.00 DP

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

D. Scott Sudderth

Signature

Date

Name of Person Signing

Docket No. 42840.0001.9

Total number of pages including cover sheet, attachments, and document: [15]

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20231

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PATENT
REEL: 012059 FRAME: 0068

EXHIBIT "A"
SCHEDULE 1

<u>Patent Number</u>	<u>Application Number</u>	<u>Title</u>
4, 454, 250	508, 184	Low Density Cellular Polyvinyl Chloride
4, 748, 060	06/946, 768	Flexible Pipe Covering Seam Sealing
5, 312, 657	07/395, 618	Phosphate Cement Pipe Cladding
5, 707, 573	08/552, 473	Method of Preparing Thermoplastic Foams Using a Gaseous Blowing Agent
5, 187, 203	07/781, 418	Non-Corrosive Elastomeric Foam for Insulating Copper Tubes
5, 569, 513	08/288, 617	Aerogel-In-Foam Thermal Insulation and its Preparation
5, 457, 136	08/288, 616	Thermal Foam Insulation
5, 525, 643	08/493, 153	Thermally Insulative, Microporous Xerogels and Aerogels
5, 705, 537	08/805, 325	Phenolic Foams Having a Low Formaldehyde Evolution
5, 762, 829	08/811, 633	Wet Silica Gels for Aerogel and Xerogel Thermal Insulation and Processes for the Wet Gels
6, 156, 223	08/051, 886	Xerogels and Their Preparation
6, 136, 216	08/642, 783	Aerogel-In-Foam Thermal Insulation and its Preparation
5, 971, 034	09/005, 387	Thermal Duct Lining Insulation
6, 110, 439	09/003, 976	Wet Silica Gels for Aerogel and Xerogel Thermal Insulation and Processes for the Wet Gels
N/A	09/236, 745	Flexible Low Density Thermoplastic Foams and Methods for Lowering the Density and Increasing the Flexibility of Thermoplastic Foams
N/A	09/077, 635	Pipe Insulation
4, 245, 055	103, 554	Expandable Rubber/Resin Blend and Resulting Foam

DATED

31 May

2000

ARMSTRONG WORLD INDUSTRIES, INC.

- and -

“ORION” ZWEIUNDVIERZIGSTE BETEILIGUNGSGESELLSCHAFT mbH

PATENT ASSIGNMENT

Herbert Smith
Exchange House
Primrose Street
London EC2A 2HS
Tel: 0171-374 8000
Fax: 0171-374 0888
Ref: 2140/2438

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30798081\documents\versions-for-signing\ASS_2000-05-
26_PATENTS-(General)-(WITH-FINAL-SCHEDULE)_europa-joint-venture--30798081_MCH.doc

BETWEEN:

- (1) **ARMSTRONG WORLD INDUSTRIES, INC.** a company incorporated in Pennsylvania, USA and whose registered office is at 2500 Columbia Avenue, Lancaster 17603, Pennsylvania, USA (the "Assignor"); and
- (2) **"ORION" ZWEIUNDVIERZIGSTE BETEILIGUNGSGESELLSCHAFT mbH** a company incorporated in Germany with commercial registry number 49001, whose registered office is Senckenberganlage 20-22, 60325 Frankfurt am Main, Germany (the "Assignee").

WHEREAS:

- (A) The Assignor is the registered proprietor of certain patent applications (the "Applications") and registered patents (together with the Applications the "Patents") short particulars of which are set out in the Schedule hereto.
- (B) By an agreement dated 27.4.2000 between the Assignor and Assignee (the "Sale and Purchase Agreement"), the Assignor has agreed, inter alia, to assign the Patents to the Assignee upon the terms set out in this assignment.

NOW THIS WITNESSETH as follows:

1. In consideration of the sum of £1 now paid by the Assignee to the Assignor (receipt of which is hereby acknowledged), the Assignor **HEREBY ASSIGNS** to the Assignee with full title guarantee:
 - 1.1 all its right, title and interest in the Patents (including, without limitation, any applications, renewals or extensions in relation thereto), **TOGETHER** with any goodwill (the "Goodwill") relating to the use of the Patents by the or in relation to the Insulation Business (as defined in the Sale and Purchase Agreement) and all statutory and other legal rights, powers, benefits and rights of action appertaining to the same including the right to claim or retain damages for any infringement or wrongful interference with the Patents or the Goodwill prior to the date of this assignment; and
 - 1.2 the right to apply for, prosecute and obtain patent or similar protection throughout the world in respect of the invention claimed in the Patents including the right to claim priority there from to the intent that the grant of any patent or similar protection shall be in the name of and vest in the Assignee.
2. The Assignor shall do all things and execute all documents as may be reasonably required by the Assignee to perfect the Assignee's title to the rights hereby assigned.

IN WITNESS WHEREOF the parties have executed this assignment the day and year first above written.

THE SCHEDULE

	Country	Status	Patent/Application Number	Title
1.	Canada	GRANTED	1189255/ 428803	LOW DENSITY FIBROUS SHEET MATERIAL
2.	Canada	GRANTED	1206700/ 410973	LOW DENSITY CELLULAR POLYVINYL CHLORIDE
3.	Canada	GRANTED	1200684/ 445662	HEAT STORAGE SYSTEM
4.	Canada	PENDING	- / 2257745	THERMAL DUCT LINING INSULATION
5.	Canada	PENDING	- / 2216594	THERMAL INSULATION AND ITS PREPARATION
6.	Canada	PENDING	- / 2228884	WET SILICA GELS FOR AEROGEL AND XEROGEL THERMAL INSULATION AND PROCESSES FOR THE WET GELS
7.	European Patent Office	PENDING ¹	- / 96.944192.2	PIPE INSULATION
8.	European Patent Office	PENDING ²	- / 98103646.0	WET SILICA GELS FOR AEROGEL AND XEROGEL THERMAL INSULATION AND PROCESSES FOR THE WET GELS
9.	Japan	PENDING	- / 52586/98	WET SILICA GELS FOR AEROGEL AND XEROGEL THERMAL INSULATION AND PROCESSES FOR THE WET GELS

¹ Filed from PCT/US96/18281 (Designating Austria, Belgium, Switzerland, Germany, Denmark, Spain, Finland, France, Great Britain, Greece, Ireland, Italy, Liechtenstein, Luxembourg, The Netherlands and Sweden)

² Designating France, Italy, Germany

10.	Mexico	PENDING	+ - / 9810436	THERMAL DUCT LINING INSULATION
11.	Norway	PENDING	- / 975162	THERMAL INSULATION AND ITS PREPARATION
12.	Norway	PENDING ³	- / 974273	PIPE INSULATION
13.	Poland	PENDING ⁴	- /P332525	PIPE INSULATION
14.	Russian Federation	PENDING	- / 98104413	WET SILICA GELS FOR AEROGEL AND XEROGEL THERMAL INSULATION AND PROCESSES FOR THE WET GELS
15.	United Kingdom	PENDING	- / 9804638.6	WET SILICA GELS FOR AEROGEL AND XEROGEL THERMAL INSULATION AND PROCESSES FOR THE WET GELS
16.	United States of America	GRANTED	4454250/ 508184	LOW DENSITY CELLULAR POLYVINYL CHLORIDE
17.	United States of America	GRANTED	4748060/ 946768	FLEXIBLE PIPE COVERING SEAM SEALING
18.	United States of America	GRANTED	5312657/ 395618	PHOSPHATE CEMENT PIPE CLADDING
19.	United States of America	GRANTED	5707573/ 552473	METHOD OF PREPARING THERMOPLASTIC FOAMS USING A GASEOUS BLOWING AGENT
20.	United States of America	GRANTED	5187203/ 781418	NON-CORROSIVE ELASTOMERIC FOAM FOR INSULATING COPPER TUBES
21.	United States of America	GRANTED	5569513/	AEROGEL-IN-FOAM THERMAL INSULATION AND ITS

³ Filed from PCT/US96/18281

⁴ Filed from PCT/US96/18281

			288617	PREPARATION
22.	United States of America	GRANTED	5457136/ 288616	THERMAL FOAM INSULATION
23.	United States of America	GRANTED	5525643/ 493153	THERMALLY INSULATIVE, MICROPOROUS XEROGELS AND AEROGELS
24.	United States of America	GRANTED	5705537/ 805325	PHENOLIC FOAMS HAVING A LOW FORMALDEHYDE EVOLUTION
25.	United States of America	GRANTED	5762829/ 811633	WET SILICA GELS FOR AEROGEL AND XEROGEL THERMAL INSULATION AND PROCESSES FOR THE WET GELS
26.	United States of America	Allowed ⁵	- / 51886	XEROGELS AND THEIR PREPARATION
27.	United States of America	AMENDED ⁶	- / 642783	AEROGEL-IN-FOAM THERMAL INSULATION AND ITS PREPARATION
28.	United States of America	Issued	5971034/ 5387	THERMAL DUCT LINING INSULATION
29.	United States of America	Allowed ⁷	- / 33976	WET SILICA GELS FOR AEROGEL AND XEROGEL THERMAL INSULATION AND PROCESSES FOR THE WET GELS
30.	United States of America	PENDING ⁸	- / 236745	FLEXIBLE LOW DENSITY THERMOPLASTIC FOAMS AND METHODS FOR LOWERING THE DENSITY AND INCREASING THE FLEXIBILITY OF THERMOPLASTIC FOAMS

⁵ Payment of Issue Fee being made.

⁶ Resubmission of PTO-lost papers in Brief on Appeal filed in response to office action dated 03/12/99.

⁷ Issue Fee paid March 22, 2000

⁸ Filing divisional US application; filing in Canada and EPO (designating Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, The Netherlands, Portugal, Spain, Sweden, Switzerland and the United Kingdom)

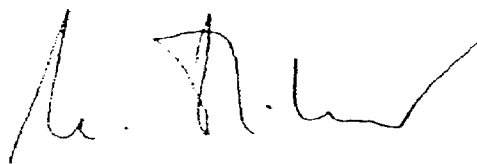
31.	United States of America	AMENDED ⁹	- / 77635	PIPE INSULATION
32.	United States of America	Issued	4245055/ 103554	EXPANDABLE RUBBER/RESIN BLEND AND RESULTING FOAM

⁹ Filed from PCT/US96/18281

SIGNED by ARMSTRONG WORLD
INDUSTRIES, INC. acting by



SIGNED by "ORION"
ZWEIUNDVIERZIGSTE
BETEILIGUNGSGESELLSCHAFT mbH
acting by



DATED

31 May

2000

ARMSTRONG WORLD INDUSTRIES, INC.

- and -

“ORION” ZWEIUNDVIERZIGSTE BETEILIGUNGSGESELLSCHAFT mbH

PATENT ASSIGNMENT

Herbert Smith

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Tel: 0171-374 8000

Fax: 0171-374 0888

Ref: 2140/2438 ASS_2000-04-26_PATENTS-
(6-US)-and-LICENCE-BACK_european-joint-venture-
-30798081_MCH

THIS ASSIGNMENT is made the 31 day of May, 2000 BETWEEN:

- (1) **ARMSTRONG WORLD INDUSTRIES, INC.**, a company incorporated in the Commonwealth of Pennsylvania and whose principal place of business is located at 2500 Columbia Avenue, Lancaster, Pennsylvania 17603 (the **"Assignor"**); and
- (2) **"ORION" ZWEIUNDVIERZIGSTE BETEILIGUNGSGESELLSCHAFT mbH** a company incorporated in Germany with commercial registry 49001 whose registered office is at Senckenberganlage 20-22, 60325 Frankfurt am Main, Germany (the **"Assignee"**).

WHEREAS:

- (A) The Assignor is the registered proprietor of certain registered patents (the **"Patents"**) short particulars of which are set out in Schedule 1 hereto.
- (B) By an agreement of even date herewith by and between the Assignor and the parent company of the Assignee (the **"Sale and Purchase Agreement"**), the Assignor has agreed, inter alia, to assign the Patents to the Assignee subject to the terms, conditions and licenses set out in this assignment.

NOW THIS WITNESSETH as follows:

1. In consideration of the sum of £1 now paid by the assignee to the Assignor (receipt of which is hereby acknowledged) and subject to the terms of sections 2 and 3 below, the Assignor hereby assigns to the Assignee all its right, title and interest in the Patents (including, without limitation, any applications, renewals or extensions in relation thereto), and all statutory and other legal rights, powers, benefits and rights of action appertaining to the same including the right to claim or retain damages for any infringement or wrongful interference with the Patents prior to or following the date of this assignment.
2. This Assignment is subject to the licenses to Interface Solutions, Inc. noted in Schedule 1 (the **"Interface Licenses"**).
3. The Assignor hereby reserves a world-wide, paid-up, royalty-free, irrevocable, perpetual, transferable (in whole or in part), sublicensable (in whole or in part), nonexclusive license to use and practice the inventions claimed in the Patents in connection with the use, manufacture, offer for sale, sale and distribution of products and services. In the event that the foregoing reservation of license with respect to the Patents fails of its purpose, the Assignee agrees to grant, and hereby grants, to the Assignor a world-wide, paid-up, royalty-free, irrevocable, perpetual, transferable (in whole or in part), sublicensable (in whole or in part), nonexclusive license to use the inventions claimed in the Patents in connection with the use, manufacture, offer for sale, sale and distribution of products and services. Without limiting the generality of the foregoing, the Assignor and the Assignee expressly acknowledge and agree that the license of the Patents shall be exercisable by

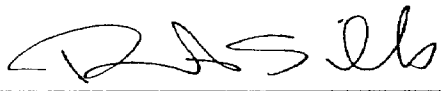
and for the benefit of the Assignor and its affiliates and their respective successors and assigns.

4. The Assignor shall do all things and execute all documents (at the cost and expense of the assignee) as may be reasonably required by the assignee to perfect the assignee's title to the rights hereby assigned.
5. The Assignee shall do all things and execute all documents (at the cost and expense of the Assignor) as may be reasonably required by the Assignor to effect the license to the Patents reserved or granted in Section 3 above.
6. This Assignment shall be binding on and inure to the benefit of the parties hereto and their respective successors and assigns.

IN WITNESS WHEREOF the parties have executed this Assignment the day and year first above written.

ASSIGNOR:

ARMSTRONG WORLD INDUSTRIES, INC.

By: 
Printed Name: ROBERT A. SILLS
Title: AUTHORIZED OFFICER

ASSIGNEE:

"ORION" ZWEIUNDVIERZIGSTE
BETEILIGUNGSGESELLSCHAFT mbH

By: 
Printed Name: ULRICH WEINEN
Title: Director

SCHEDULE 1

REGISTERED PATENTS*

OWNER	APPLN NO DATE	PATENT NO PATENT DATE	TITLE	STATUS
Armstrong World Industries	U.S. Application Serial No. 058,800 June 5, 1987	U.S. Patent No. 4,762,643 August 9, 1988	Binders and fibers combined with flocced mineral materials and water-resistant articles made therefrom	In force
Armstrong World Industries	U.S. Application Serial No. 015,262 February 17, 1987	U.S. Patent No. 4,775,586 October 4, 1988	Paper, paper products, film composites and other silicate-polymers, construction materials	In force
Armstrong World Industries	U.S. Application Serial No. 015,756 February 17, 1987	U.S. Patent No. 4,877,484 October 31, 1989	Flocced 2:1 layered silicates and water-resistant articles made therefrom	In force
Armstrong World Industries	U.S. Application Serial No. 339,410 April 14, 1989	U.S. Patent No. 4,990,405 February 5, 1991	Multi-ply composites and sheets of epoxy and flocced 2:1 layered silicates	In force
Armstrong World Industries	U.S. Application Serial No. 428,725 October 30, 1989	U.S. Patent No. 5,049,237 September 17, 1991	Layered silicates and water-resistant articles made therefrom	In force

OWNER	APPLN NO DATE	PATENT NO PATENT DATE	TITLE	STATUS
Armstrong World Industries	U.S. Application Serial No. 653,177 February 11, 1991	U.S. Patent No. 5,183,704 February 2, 1993	High microporous 2:1 layered silicate materials	In force

*Subject to the exclusive, perpetual, irrevocable, transferable, sublicensable, worldwide, fully-paid-up, royalty-free license to Interface Solutions, Inc., a Pennsylvania corporation with respect to this patent and all divisionals, continuations, continuations-in-part, renewals, reissues, reexaminations and foreign counterparts of this patent, limited to: (i) heat-shield applications in the vehicular industry, and (ii) gasket and speciality paper products, including felt backing for floor products.