

PATENT ASSIGNMENT

Electronic Version v1.1
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SUBMISSION TYPE:	NEW ASSIGNMENT																														
NATURE OF CONVEYANCE:	ASSIGNMENT																														
CONVEYING PARTY DATA																															
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Honeywell International Inc.</td><td>05/14/2009</td></tr><tr><td>Honeywell Resins & Chemicals LLC</td><td>05/14/2009</td></tr></tbody></table>		Name	Execution Date	Honeywell International Inc.	05/14/2009	Honeywell Resins & Chemicals LLC	05/14/2009																								
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RECEIVING PARTY DATA																															
<table border="1"><tr><td>Name:</td><td>Shaw Industries Group, Inc.</td></tr><tr><td>Street Address:</td><td>616 E. Walnut Avenue</td></tr><tr><td>City:</td><td>Dalton</td></tr><tr><td>State/Country:</td><td>GEORGIA</td></tr><tr><td>Postal Code:</td><td>30722</td></tr></table>		Name:	Shaw Industries Group, Inc.	Street Address:	616 E. Walnut Avenue	City:	Dalton	State/Country:	GEORGIA	Postal Code:	30722																				
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PROPERTY NUMBERS Total: 51																															
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PATENT
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Patent Number:	5464676
Patent Number:	5445884
Patent Number:	5413857
Patent Number:	5486417
Patent Number:	5489475
Patent Number:	5512367
Patent Number:	5464584
Patent Number:	5533883
Patent Number:	5620644
Patent Number:	5575063
Patent Number:	5162074
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Patent Number:	5932346
Patent Number:	6162382
Patent Number:	6531218
Patent Number:	6132839
Patent Number:	6158204
Patent Number:	6705069
Patent Number:	6447703
Patent Number:	6332994

Patent Number:	6673450
Application Number:	11120179

CORRESPONDENCE DATA

Fax Number: (678)420-9301

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

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Address Line 2: Suite 1000

Address Line 4: Atlanta, GEORGIA 30309

ATTORNEY DOCKET NUMBER:

19133.3002

NAME OF SUBMITTER:

Kean J. DeCarlo

Total Attachments: 44

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INTELLECTUAL PROPERTY ASSIGNMENT AND TRANSFER AGREEMENT

This Intellectual Property Assignment and Transfer Agreement ("Agreement") is made as of January 1, 2009 ("Effective Date"), among Honeywell International Inc., a Delaware corporation, Honeywell Resins & Chemicals LLC, Honeywell Intellectual Property International ("HIPI"), (collectively referred to as "Honeywell"), and Shaw Industries Group, Inc., a Georgia corporation ("Shaw").

WHEREAS, Honeywell and Shaw entered into a License Agreement dated October 29, 2005 ("License Agreement"), whereby Honeywell granted Shaw rights to certain patents and other intellectual property owned or possessed by Honeywell;

WHEREAS, Honeywell owns certain patents, patent applications and foreign counterparts related to carpet fiber technology identified in Exhibit A (the "Patents"), which are subject to the License Agreement and which Honeywell no longer wishes to maintain; and

WHEREAS, (i) Pursuant to Article 5.1 of the License Agreement Honeywell desires to assign and transfer its rights, title and interest to the Patents to Shaw and (ii) Shaw desires to acquire and assume the rights, title, interest and obligations in and to the Patents.

NOW, THEREFORE, in consideration of the premises set forth above and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereby agree as follows:

1. Honeywell hereby assigns, transfers, and conveys to Shaw all right, title and interest in and to the Patents identified in Exhibit A. The assignment under this section includes the right to sue or recover and retain damages, costs and attorney's fees for past, current and future infringement, misappropriation or other claims.
2. As of the Effective Date, Shaw shall be solely responsible and bears the expense for maintenance fees, annuities, attorneys' fees, prosecution of assigned applications or any similar expenses for any of the Patents assigned to it in this Agreement.
3. Shaw may record executed assignments, in the form substantially similar to Exhibit B, with the applicable patent offices after the Effective date of this Agreement.
4. Shaw hereby grants to Honeywell and its affiliates a royalty-free, non-exclusive license to the Patents for the life of those assets.
5. Shaw hereby covenants not to sue Honeywell or any of its affiliates, on a claim for patent infringement under the Patents. Shaw also covenants not to sue Honeywell (or its affiliates') customers, on a claim for patent infringement under the Patents.
6. Honeywell represents and warrants that it owns all right, title and interest to the Patents and has the full power and authority to enter into this Agreement and carry out its



obligations hereunder. Except for the foregoing representation, Honeywell disclaim all warranties of any kind concerning the Patents. SPECIFICALLY, HONEYWELL HEREBY DISCLAIMS THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND THE WARRANTY OF NONINFRINGEMENT. In no event will Honeywell be liable for any loss of use, interruption of business or lost profits or for any other special, exemplary, incidental, indirect, punitive, consequential or other damages of any kind incurred by Shaw or third parties in connection with this Agreement.

7. Honeywell shall have zero (\$0) financial liability under any theory of recovery, whether in contract, tort (including negligence and strict liability), warranty, indemnity or otherwise. Under no circumstances will Honeywell be liable for any damages for loss of use, business interruption, lost profits, revenue or opportunity, or for any other indirect, special, exemplary, incidental, punitive or consequential loss or damages of any kind or nature.

8. The parties agree to keep the terms of this agreement confidential and will not now or hereafter divulge any of this information to any third party except: (a) with the prior written consent of the other party; or (b) as otherwise may be required by law or legal process.

9. Neither party is authorized to act as agent for or to represent the other party hereunder in any way. The parties are not to be deemed for any purpose, partners or joint venturers.

10. At the request of Shaw and at its expense, Honeywell will execute and deliver documents and perform such acts that may be required to effecting the assignment of the Patents to Shaw.

11. This Agreement shall bind and inure to the benefit of Honeywell and Shaw and their respective successors and assigns.

12. In the event that any provision of this Agreement is determined to be invalid by a court of competent jurisdiction from which no appeal can or has been taken, such provision shall automatically be severed from this Agreement (and replaced by a valid term which complies as close as possible with the parties' original intent at the time the Agreement was signed) and all other provisions hereof shall remain in full force and effect.

13. This Agreement, including its Exhibits, constitutes the entire agreement and understanding between the parties hereto with respect to the subject matter hereof and merges and supersedes all prior discussions and writings with respect thereto. No modification to this Agreement shall be effective unless made in writing and signed by both parties.

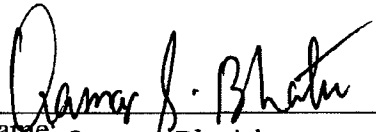
14. This Agreement shall be construed by and governed in accordance with the Laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule that would cause the application of the Laws of any jurisdiction other than the State of New York.

15. This Agreement may be executed in one or more counterparts for the convenience of the parties hereto, all of which together shall constitute one and the same instrument.

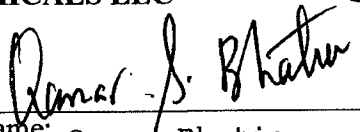


IN WITNESS WHEREOF, this Assignment and Transfer Agreement has been duly executed and delivered by their respective duly authorized officers on the date and year first written above.

HONEYWELL INTERNATIONAL INC.

By: 
Name: Qamar Bhatia
Title: Authorized Officer

HONEYWELL RESINS & CHEMICALS LLC

By: 
Name: Qamar Bhatia
Title: Vice President & General Manager

SHAW INDUSTRIES GROUP, INC.

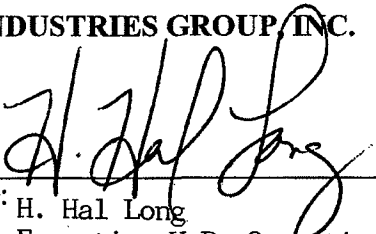
By: 
Name: H. Hal Long
Title: Executive V.P. Operations

Exhibit A

PATENTS, PATENT APPLICATIONS AND FOREIGN COUNTERPARTS

#225527v2

LICENSE/MAINTENANCE SNAP SHOT
CARPET FIBERS (SBE 4580)

FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
15200060	Shaw	JAPA (pending appln)		FLAME RETARDANT POLYAMIDE FIBER AND CARPET	A FLAME RETARDANT POLYAMIDE IS PREPARED AND USED TO MAKE A FLAME RETARDANT CARPET. THE POLYAMIDE FIBER HAS INCORPORATED THEREIN 0.01 TO 2.9 WEIGHT PERCENT ZINC, 0.002 TO 0.58 WEIGHT PERCENT MOLYBDENUM, AND 0.05 TO 1.3 WEIGHT PERCENT CHLORINE, AND IS MADE FROM A MASTERBATCH CONTAINING 1 TO 20 PERCENT OF THE POLYAMIDE IN THE EXTRUDED FIBER

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LICENSE/MAINTENANCE SNAP SHOT
CARPET FIBERS (SBE 4580)

FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
23700030	Shaw	BELG EP0408633	3/16/09	BINDER POWDER CARPET FIBER	PILE CARPET OF NYLON, POLYESTER, OR OTHER PILE YARN, IS COATED WITH 0.1 TO 5 WEIGHT PERCENT, BASED ON WEIGHT OF THE PILE YARN OF A HEAT ACTIVATED ADHESIVE POWDER HAVING A MELTING POINT WITHIN THE RANGE OF 100 TO 170 DEGREES C, PREFERABLY 110 TO 150 DEGREES C. FOR NYLON PILE YARN A PREFERRED ADHESIVE POWDER IS A TERNARY COPOLYAMIDE SELECTED FROM THE GROUP CONSISTING OF 6/6 6/12; 6/6 6/11; AND 6/6 6/12, 12. THE POWDER IS HEAT ACTIVATED, FOR EXAMPLE TO 195 DEGREES C FOR ABOUT 60 SECONDS. THE TREATED CARPET DISPLAYS ENHANCED CARPET TUFT IMPROVED WEAR PERFORMANCE, APPEARANCE, IMPROVED RESILIENCE, CARPET SURFACE CLEANNESS, AND
23700030	Shaw	CANA 1323253	10/19/10	BINDER POWDER CARPET FIBER	
23700030	Shaw	FRAN EP0408633	3/16/09	BINDER POWDER CARPET FIBER	
23700030	Shaw	NETH EP0408633	3/16/09	BINDER POWDER CARPET FIBER	
23700030	Shaw	GERW P68909408.0	3/16/09	BINDER POWDER CARPET FIBER	

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LICENSE/MAINTENANCE SNAP SHOT
CARPET FIBERS (SBE 4580)

FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
32510030	Shaw	BELG EP0705352	6/23/14	HOLLOW TRILOBAL CROSS-SECTION FILAMENTS	THIS INVENTION RELATES TO A TRILOBAL FILAMENT HAVING AT LEAST ONE AXIALLY EXTENDING VOID, PREFERABLY ONE AXIALLY EXTENDING VOID IN EACH LOBE, WHEREIN EACH LOBE HAS A COMPOSITE CURVE PROFILE HAVING A FIRST ARM ANGLE α AND A SECOND ARM ANGLE β , THE CROSS-SECTION HAS A MODIFICATION RATIO OF 2.4 TO 5.0 AND THE TOTAL CROSS-SECTIONAL AREA IS 5 TO 15 PERCENT VOID. IN A FURTHER ASPECT, THIS INVENTION IS A SPINARETTE FOR PRODUCING A FILAMENT COMPRISING AT LEAST ONE BORE GROUP, WHEREIN THE BORE GROUP HAS THREE LEGS DIVERGENT LEG INCLUDES TWO SUBSTANTIALLY PARALLEL CAPILLARY SECTIONS AND ONE NIPPLE CAPILLARY SECTION WHICH EXTENDS TO THE OUTERMOST POINT OF EACH LEG FROM EACH OTHER BY 130 DEGREES TO 150 DEGREES CENTIGRADE AND EACH
32510030	Shaw	CANA 2164210	6/23/14	HOLLOW TRILOBAL CROSS-SECTION FILAMENTS	
32510030	Shaw	FRAN EP0408633	6/23/14	HOLLOW TRILOBAL CROSS-SECTION FILAMENTS	
32510030	Shaw	GERM P69409381.5	6/23/14	HOLLOW TRILOBAL CROSS-SECTION FILAMENTS	
32510030	Shaw	GBRI EP0408633	6/23/14	HOLLOW TRILOBAL CROSS-SECTION FILAMENTS	
32510030	Shaw	ITAL EP0408633	6/23/14	HOLLOW TRILOBAL CROSS-SECTION FILAMENTS	
32510030	Shaw	NETH EP0408633	6/23/14	HOLLOW TRILOBAL CROSS-SECTION FILAMENTS	
32510030	Shaw	USA US5322736	6/24/13	HOLLOW TRILOBAL CROSS-SECTION FILAMENTS	

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LICENSE/MAINTENANCE SNAP SHOT
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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
32530030	Shaw	ASTL 680839	10/8/13	IMPROVED COPOLYAMIDES	A SYNTHETIC YARN MADE FROM A BLEND OF BASE FIBERS SELECTED FROM THE GROUP CONSISTING OF POLYESTER, NYLON 6 AND NYLON 66, AND 1-12 WEIGHT PERCENT OF A HEAT ACTIVATED BINDER FIBER HAVING A MELTING POINT WITHIN THE RANGE OF 165-190 DEGREES C, SAID BINDER FIBER BEING MADE FROM A COPOLYAMIDE WHICH IS DERIVED FROM A MIXTURE OF 50 TO 85 WT.% CAPROLACTAM, 0 TO 40 WT. % HEXAMETHYLENEDIAMINE ADIPATE OR A COMBINATION OF HEXAMETHYLENE- DIAMINE AND ADIPIC ACID, AND OPTIONALLY A SALT SELECTED FROM THE GROUP CONSISTING OF HEXAMETHYLENEDIAMINE DODECANEDIOATE, AND HEXAMETHYLENEDIAMINE TEREPHTHALATE; AND A CHAIN TERMINATOR SELECTED FROM AT LEAST ONE OF THE GROUP CONSISTING OF A FATTY ACID AND A FATTY AMINES, WHEREIN SAID FATTY ACID OR FATTY AMINE INCLUDE AT LEAST 14 CARBON ATOMS. THE BINDER FIBER IS CAPABLE OF BEING PELLETIZED INTO CHIPS, LEACHED AND SPUN INTO YARN ON A PACKAGE WITHOUT ANY SIGNIFICANT STICKING EITHER OF THE CHIPS TO ONE ANOTHER OR THE YARN ON THE PACKAGE. HEXYMETHYLENEDIAMINE AZELEATE, HEXAMETHYLENEDIAMINE SEBACATE
32530030	Shaw	BELG EP0665907	10/8/13	IMPROVED COPOLYAMIDES	
32530030	Shaw	CANA 2145744	10/8/13	IMPROVED COPOLYAMIDES	
32530030	Shaw	CHIN 1048297	10/14/13	IMPROVED COPOLYAMIDES	
32530030	Shaw	FRAN EP0665907	10/8/13	IMPROVED COPOLYAMIDES	
32530030	Shaw	GERM P69304929.4	10/8/13	IMPROVED COPOLYAMIDES	
32530030	Shaw	GBRI EP0665907	10/8/13	IMPROVED COPOLYAMIDES	
32530030	Shaw	ITAL EP0665907	10/8/13	IMPROVED COPOLYAMIDES	
32530030	Shaw	NETH EP0665907	10/8/13	IMPROVED COPOLYAMIDES	
32530030	Shaw	USA US5478624	12/26/12	IMPROVED COPOLYAMIDES	

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LICENSE/MAINTENANCE SNAP SHOT
CARPET FIBERS (SBE 4580)

FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
36380030	Shaw	USA 01 US5686517	5/16/14	POLYAMIDE FIBER	A POLYAMIDE FIBER THAT INCLUDES 0.3 TO 2.0 WEIGHT PERCENT KAOLIN CLAY HAVING AN AVERAGE PARTICLE SIZE OF 0.1 TO 2.0 MICRONS, AND LESS THAN 0.1 WEIGHT PERCENT TITANIUM DIOXIDE, SAID WEIGHT PERCENTS BEING BASED ON THE WEIGHT OF THE FIBER, AND A METHOD FOR MAKING THE SAME. THE POLYAMIDE FIBER IS PARTICULARLY USEFUL AS A CARPET FIBER.
36380030	Shaw	USA 01 US5773119	5/16/14	POLYAMIDE FIBER	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
41400030	Shaw	CHIN ZL97195703	4/17/17	APPARATUS AND METHOD FOR CHARACTERIZING FIBER CRIMPS	APPARATUS AND METHOD ARE DESCRIBED FOR MEASURING AND CONTROLLING THE CRIMP CHARACTERISTICS OF A MOVING CRIMPED TOW. A LIGHT SOURCE ILLUMINATES A SECTION OF THE MOVING CRIMPED TOW AND AT LEAST ONE CAMERA ACQUIRES A VIDEO IMAGE OF THE TOW. THE ACQUIRED IMAGE IS DIGITIZED AND A PROCESSOR DECOMPOSES THE INTERLACED IMAGE INTO TOW NON-INTERLACED FIELD IMAGES. CRIMP CHARACTERISTICS ARE DERIVED BASED ON DECOMPOSED IMAGES.
41400030	Shaw	FRAN EP0894241	4/17/17	APPARATUS AND METHOD FOR CHARACTERIZING FIBER CRIMPS	
41400030	Shaw	GERM P69713583.7	4/17/17	APPARATUS AND METHOD FOR CHARACTERIZING FIBER CRIMPS	
41400030	Shaw	GBRI EP0894241	4/17/17	APPARATUS AND METHOD FOR CHARACTERIZING FIBER CRIMPS	
41400030	Shaw	HONG HK1020612	4/17/17	APPARATUS AND METHOD FOR CHARACTERIZING FIBER CRIMPS	
41400030	Shaw	ITAL EP0894241	4/17/17	APPARATUS AND METHOD FOR CHARACTERIZING FIBER CRIMPS	
41400030	Shaw	MEXI 211608	4/17/17	APPARATUS AND METHOD FOR CHARACTERIZING FIBER CRIMPS	
41400030	Shaw	NETH EP0894241	4/17/17	APPARATUS AND METHOD FOR CHARACTERIZING FIBER CRIMPS	
41400030	Shaw	SWIT EP0894241	4/17/17	APPARATUS AND METHOD FOR CHARACTERIZING FIBER CRIMPS	
41400030	Shaw	USA US6043840	4/19/16	APPARATUS AND METHOD FOR CHARACTERIZING FIBER CRIMPS	

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LICENSE/MAINTENANCE SNAP SHOT
CARPET FIBERS (SBE 4580)

FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
43970030	Shaw	BELG EP1337701	11/19/21	UNTWISTED WRAPPED SINGLES YARNS AND CARPETS MANUFACTURED THEREFROM	THE YARNS OF THE INVENTION INCLUDE UNTWISTED WRAPPED SINGLES YARNS HAVING A CORE STRAND AND A WRAPPER YARN. THE WRAPPER YARN IS A BASE SYNTHETIC FIBER AND A HEAT-ACTIVATED BINDER FIBER WITH A MELTING POINT SUBSTANTIALLY BELOW THAT OF THE BASE SYNTHETIC FIBER. THE SAXONY CARPETS OF THE INVENTION ARE MADE FROM UNTWISTED SINGLES YARN TUFTS AND ARE POSSESSED OF SURFACE APPEARANCE, INDIVIDUAL TIP RETENTION, PILE DENSITY, RESILIENT HAND AND WEAR RESISTANCE COMPARABLE OR SUPERIOR TO CONVENTIONAL SAXONY CARPETS MADE FROM MULTIPLE PLYED TWIST SET YARNS.
43970030	Shaw	FRAN EP1337701	11/19/21	UNTWISTED WRAPPED SINGLES YARNS AND CARPETS MANUFACTURED THEREFROM	
43970030	Shaw	GERM 60104659.9	11/19/21	UNTWISTED WRAPPED SINGLES YARNS AND CARPETS MANUFACTURED THEREFROM	
43970030	Shaw	GBRI EP1337701	11/19/21	UNTWISTED WRAPPED SINGLES YARNS AND CARPETS MANUFACTURED THEREFROM	
43970030	Shaw	ITAL EP1337701	11/19/21	UNTWISTED WRAPPED SINGLES YARNS AND CARPETS MANUFACTURED THEREFROM	
43970030	Shaw	NETH EP1337701	11/19/21	UNTWISTED WRAPPED SINGLES YARNS AND CARPETS MANUFACTURED THEREFROM	
43970030	Shaw	SPAIN EP1337701	11/19/21	UNTWISTED WRAPPED SINGLES YARNS AND CARPETS MANUFACTURED THEREFROM	
43970030	Shaw	SWITZ EP1337701	11/19/21	UNTWISTED WRAPPED SINGLES YARNS AND CARPETS MANUFACTURED THEREFROM	
43970030	Shaw	TURK TR200402870	11/19/21	UNTWISTED WRAPPED SINGLES YARNS AND CARPETS MANUFACTURED THEREFROM	

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LICENSE/MAINTENANCE SNAP SHOT
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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
43970030	Shaw	USA US6658835	11/28/20	UNTWISTED WRAPPED SINGLES YARNS AND CARPETS MANUFACTURED THEREFROM	
43970030	Shaw	USA 01 US7398640	4/7/22	UNTWISTED WRAPPED SINGLES YARNS AND CARPETS MANUFACTURED THEREFROM	
43970030	Shaw	USA 02 US7402217	10/26/22	UNTWISTED WRAPPED SINGLES YARNS AND CARPETS MANUFACTURED THEREFROM	

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LICENSE/MAINTENANCE SNAP SHOT
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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
45300030	Shaw	EPC	(filed appln - 01961975.8)	ABRASION RESISTANT, HIGH BULK FIBER	HIGH BULK COPOLYMER FILAMENTS OF POLYDIORGANOSILOXANE MODIFIED BASE POLYMERS PROVIDE HIGH COVERAGE FIBERS DEMONSTRATING EXCEPTIONAL ABRASION RESISTANCE AND ARE USEFUL IN A NUMBER OF APPLICATIONS, ESPECIALLY LOWER WEIGHT AUTOMOTIVE CARPETS.

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
45780030	Shaw	FRAN EP0441782	5/5/09	APPARATUS FOR INCREMENTALLY DRAWING FIBERS	A FIBER DRAWING PROCESS AND APPARATUS IN WHICH THE FIBERS ARE DRAWN IN SMALL INCREMENTS BY PASSING THE FIBERS IN MULTIPLE WRAPS OVER ON ROTATABLY MOUNTED SPACED APART SPINDLES HAVING DISCRETE CIRCUMFERENTIAL MICROTERRACED SURFACES WHICH SUPPORT THE FIBER. THE TERRACED SURFACES ARE PARALLEL TO THE AXIS OF ROTATION OF THE SPINDLES AND EACH MICROTERRACED SURFACE HAVING A CONTINUALLY INCREASING RADIUS. THE NUMBER OF MICROTERRACES IS EQUAL TO OR LESS THAN THE NUMBER OF WRAPS OF THE FIBER ABOUT THE SPINDLE. CYLINDRICAL ROLLS IN TANDEM WITH THE MICROTERRACED SPINDLES PERMIT FINE ADJUSTMENTS OF THE DRAW RATIOS
45780030	Shaw	GERM P68927805.5	5/5/09	APPARATUS FOR INCREMENTALLY DRAWING FIBERS	
45780030	Shaw	GBRI EP0441782	5/5/09	APPARATUS FOR INCREMENTALLY DRAWING FIBERS	
45780030	Shaw	ITAL EP0441782	5/5/09	APPARATUS FOR INCREMENTALLY DRAWING FIBERS	
45780030	Shaw	NETH EP0441782	5/5/09	APPARATUS FOR INCREMENTALLY DRAWING FIBERS	
45780030	Shaw	SWIZ EP0441782	5/5/09	APPARATUS FOR INCREMENTALLY DRAWING FIBERS	
45780030	Shaw	USA 02 US5340523	8/23/11	APPARATUS FOR INCREMENTALLY DRAWING FIBERS	
45780030	Shaw	USA 03 US5449503	8/23/11	APPARATUS FOR INCREMENTALLY DRAWING FIBERS	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
50810030	Shaw	USA US6674887	4/19/16	APPARATUS AND METHOD FOR CHARACTERIZING FIBER CRIMPS	APPARATUS AND METHOD ARE DESCRIBED FOR MEASURING AND CONTROLLING THE CRIMP CHARACTERISTICS OF A MOVING CRIMPED TOW. A LIGHT SOURCE ILLUMINATES A SECTION OF THE MOVING CRIMPED TOW AND AT LEAST ONE PROGRESSIVE SCANNING CAMERA ACQUIRES A NON-INTERLACED VIDEO IMAGE OF THE TOW. THE ACQUIRED IMAGE IS DIGITIZED AND A PROCESSOR ANALYZES THE NON-INTERLACED IMAGE. CRIMP CHARACTERISTICS ARE DERIVED BASED ON THIS ANALYSIS.
50810030	Shaw	USA 01 US6853742	7/24/20	APPARATUS AND METHOD FOR CHARACTERIZING FIBER CRIMPS	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF2729	Shaw	BELG EP0516119	5/29/12	HOLLOW TRILOBAL CROSS SECTION FILAMENT	A MULTILOBAL SYNTHETIC POLYMERIC FILAMENT HAS A SINGLE APPROXIMATELY AXIALLY EXTENDING CENTRAL VOID. THE TOTAL CROSS-SECTIONAL VOID AREA OF THE FILAMENT IS BETWEEN ABOUT 3 AND ABOUT 10 PERCENT VOID.
BASF2729	Shaw	CANA 2064659	4/1/12	HOLLOW TRILOBAL CROSS SECTION FILAMENT	
BASF2729	Shaw	FRAN EP0516119	5/29/12	HOLLOW TRILOBAL CROSS SECTION FILAMENT	
BASF2729	Shaw	GERM P69224103.5	5/29/12	HOLLOW TRILOBAL CROSS SECTION FILAMENT	
BASF2729	Shaw	GBRI EP0516119	5/29/12	HOLLOW TRILOBAL CROSS SECTION FILAMENT	
BASF2729	Shaw	ITAL EP0516119	5/29/12	HOLLOW TRILOBAL CROSS SECTION FILAMENT	
BASF2729	Shaw	NETH EP0516119	5/29/12	HOLLOW TRILOBAL CROSS SECTION FILAMENT	
BASF2729	Shaw	SPAIN EP0516119	5/29/12	HOLLOW TRILOBAL CROSS SECTION FILAMENT	
BASF2729	Shaw	SWITZ EP0516119	5/29/12	HOLLOW TRILOBAL CROSS SECTION FILAMENT	
BASF2729	Shaw	USA US5208107	5/31/11	HOLLOW TRILOBAL CROSS SECTION FILAMENT	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF2746	Shaw	USA US5714255	11/2/09	PHOSPHORESCENT DIRECTIONAL SIGNALS & MANUFACTURING METHOD	CLAIMED ARE A METHOD OF MAKING A DIRECTION INDICATING CARPET, USEFUL IN TEMPORARILY UNLIGHTED BUILDING HALLWAYS AND ROOMS. SYMBOLS ARE TUFTED INTO THE CARPET USING ZINC SULFIDE COPPER ACTIVATED PIGMENTS IN CONCENTRATION OF 2% IN THE FIBER

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF2788	SHAW	BELG EP0574772		REDUCED STAINING CARPET YARNS AND CARPET	A MULTILOBAL COMPOSITE FILAMENT HAVING TWO DIFFERENT COMPONENTS ARRANGED IN A SHEATH CORE RELATIONSHIP WITH A POLYAMIDE CORE AND A HYDROPHOBIC SHEATH POLYMER AND EXHIBITING REDUCED STAINABILITY. THESE FILAMENTS ARE PARTICULARLY USEFUL TO THE MANUFACTURE OF CARPETS.
BASF2788	SHAW	CANA 2084866		REDUCED STAINING CARPET YARNS AND CARPET	
BASF2788	SHAW	FRAN EP0574772		REDUCED STAINING CARPET YARNS AND CARPET	
BASF2788	SHAW	GBRI EP0574772		REDUCED STAINING CARPET YARNS AND CARPET	
BASF2788	SHAW	GERM P69326285.0		REDUCED STAINING CARPET YARNS AND CARPET	
BASF2788	SHAW	ITAL EP0574772		REDUCED STAINING CARPET YARNS AND CARPET	
BASF2788	SHAW	NETH EP0574772		REDUCED STAINING CARPET YARNS AND CARPET	
BASF2788	SHAW	SWIT EP0574772		REDUCED STAINING CARPET YARNS AND CARPET	
BASF2788	SHAW	USA 5464676	11/7/2012	REDUCED STAINING CARPET YARNS AND CARPET	
BASF2788	SHAW	USA 5445884	8/29/2012	REDUCED STAINING CARPET YARNS AND CARPET	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF2794	Shaw	BELG EP0601372	11/22/13	MIXED CROSS-SECTION CARPET YARN	A BLEND OF FIBERS IS MADE OF ABOUT 51 TO 90% BY WEIGHT OF BASE FIBERS (A) SELECTED FROM TRIANGULAR TRILOBAL FIBERS HAVING A MODIFICATION RATIO RANGING FROM 2.4 TO 3.4; HOLLOW PENTAGONAL FIBERS; STANDARD TRILOBAL FIBERS HAVING A MODIFICATION RATIO OF AT LEAST 2.6; POINTED LOBE TRILOBAL FIBERS HAVING A MODIFICATION RATIO OF AT LEAST 2.6; AND MIXTURES THEREOF, AND ABOUT 10 TO 49% BY WEIGHT OF ACCENT FIBERS (B) SELECTED FROM STANDARD TRILOBAL FIBERS HAVING A MODIFICATION RATIO RANGING FROM 1.7 TO 2.4; POINTED LOBE TRILOBAL FIBERS HAVING A MODIFICATION RATIO RANGING FROM 2.0 TO 2.9; AND MIXTURES THEREOF. THE FIBERS (A) AND (B) HAVE A DENIER PER FILAMENT WITHIN THE RANGE REPRESENTED BY THE AREA ENCLOSED BY SIDES A, B, C, D AND E OF FIG. 1. WHERE FIBERS (A) AND (B) ARE BOTH POINTED LOBE TRILOBAL FIBERS WITH THE SAME MODIFICATION RATIO AND DENIER PER FILAMENT, THEN FIBERS (A) ARE DELUSTERED AND FIBERS (B) ARE UNDELUSTERED
BASF2794	Shaw	CANA 2106421	9/17/08	MIXED CROSS-SECTION CARPET YARN	
BASF2794	Shaw	FRAN EP0601372	11/22/13	MIXED CROSS-SECTION CARPET YARN	
BASF2794	Shaw	GERM P69315041.6	11/22/13	MIXED CROSS-SECTION CARPET YARN	
BASF2794	Shaw	GBRI EP0601372	11/22/13	MIXED CROSS-SECTION CARPET YARN	
BASF2794	Shaw	ITAL EP0601372	11/22/13	MIXED CROSS-SECTION CARPET YARN	
BASF2794	Shaw	NETH EP0601372	11/22/13	MIXED CROSS-SECTION CARPET YARN	
BASF2794	Shaw	SWITZ EP0601372	11/22/13	MIXED CROSS-SECTION CARPET YARN	
BASF2794	Shaw	USA 01 US5413857	12/10/12	MIXED CROSS-SECTION CARPET YARN	
BASF2794	Shaw	USA 01 US5486417	1/23/13	MIXED CROSS-SECTION CARPET YARN	
BASF2794	Shaw	USA 01 US5489475	2/6/13	MIXED CROSS-SECTION CARPET YARN	
BASF2794	Shaw	USA 02 US5512367	4/30/13	MIXED CROSS-SECTION CARPET YARN	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF2799	Shaw	USA US5464584	11/7/12	SOIL AND STAIN RESISTANT CARPET FIBER & PROCESS FOR PRODUCING THE SAME	A METHOD FOR PRODUCING CARPET YARN PRODUCES YARN HAVING SUBSTANTIAL SOIL HIDING, SOIL REPELLING AND RESISTANCE TO STAINING WITH ACID DYE CHARACTERISTICS. THE YARN IS MADE BY FORMING AT LEAST ONE HOLLOW TRILOBAL FIBER FROM A MOLTEN NYLON POLYMER HAVING AN AMINE END GROUP LEVEL BELOW ABOUT 26 MEQ/KG, THE FIBER HAVING A MODIFICATION RATIO OF ABOUT 2 AND A VOID VOLUME OF AT LEAST 3%; QUENCHING THE FORMED FIBER SUFFICIENTLY TO SOLIDIFY THE MOLTEN NYLON; IMMEDIATELY AFTER QUENCHING, AT A YARN SPEED OF AT LEAST 300 MPM, FINISHING THE FIBER WITH SPIN FINISH CONTAINING FLUORO-CHEMICAL; FULLY DRAWING THE FINISHED FIBER; TEXTURING THE FINISHED YARN BY A HOT FLUID TEXTURING PROCESS; AND SUBSEQUENTLY, APPLYING TO THE TEXTURED YARN A SULFONATED STAIN-BLOCKER, THE STAINBLOCKER BEING HEATED TO AT LEAST 50°C AND APPLIED WHILE THE FIBER TEMPERATURE IS AT LEAST ABOUT 100°C IN THE STAIN-BLOCKER APPLICATION STEP. THE YARN TRAVELS AT A RATE SUFFICIENT TO PERMIT FIXATION OF THE STAINBLOCKER WHILE MINIMIZING PENETRATION OF STAINBLOCKER INTO THE YARN.

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF2834	SHAW	ATRA EP0677600		FLOW DISTRIBUTION PLATES	FLOW DISTRIBUTION PLATE SETS FORM AN ELEMENT OF A SPIN PACK WHICH HAS A SPINNERET FOR SPINNING SYNTHETIC FIBERS FROM ONE OR MORE LIQUID POLYMER STREAMS. THE PLATE SETS INCLUDE AT LEAST ONE PATTERNED PLATE AND FOR EACH PATTERNED PLATE, AT LEAST ONE BOUNDARY PLATE. THE PATTERNED PLATE HAS AT LEAST ONE FLOW DISTRIBUTION PATTERN STENCILED THEREIN BY CUTTING THROUGH. THE BOUNDARY PLATE IS STACKED SEALINGLY ADJACENT TO THE PATTERN PLATE AND HAS CUT-THROUGH PORTIONS TO FORM AT LEAST ONE FLOW-THROUGH CHANNEL TO ALLOW FLUID FLOW THROUGH THE PATTERNED PLATE AND SOLID PORTIONS WHERE THE PATTERNED PLATE IS CUT THROUGH TO ACCOMPLISH FLUID FLOW IN A DIRECTION TRANSVERSE TO THE FLOW IN THE FLOW-THROUGH CHANNEL. THE LIQUID POLYMER STREAMS FLOW AS DISCRETE STREAMS THROUGH THE FLOW DISTRIBUTION PLATE SETS TO THE SPINNERET.
BASF2834	SHAW	BELG EP0677600		FLOW DISTRIBUTION PLATES	
BASF2834	SHAW	CANA 2107930		FLOW DISTRIBUTION PLATES	
BASF2834	SHAW	FRAN EP0677600		FLOW DISTRIBUTION PLATES	
BASF2834	SHAW	GBRI EP0677600		FLOW DISTRIBUTION PLATES	
BASF2834	SHAW	GERM P69407268.0		FLOW DISTRIBUTION PLATES	
BASF2834	SHAW	IREL EP0677600		FLOW DISTRIBUTION PLATES	
BASF2834	SHAW	ITAL EP0677600		FLOW DISTRIBUTION PLATES	
BASF2834	SHAW	JAPA 3484218		FLOW DISTRIBUTION PLATES	
BASF2834	SHAW	KORS 300778		FLOW DISTRIBUTION PLATES	
BASF2834	SHAW	LUXE EP0677600		FLOW DISTRIBUTION PLATES	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF2834	SHAW	NETH EP0677600		FLOW DISTRIBUTION PLATES	
BASF2834	SHAW	SWED EP0677600		FLOW DISTRIBUTION PLATES	
BASF2834	SHAW	SWIT EP0677600		FLOW DISTRIBUTION PLATES	
BASF2834	SHAW	USA 5533883	7/9/2013	FLOW DISTRIBUTION PLATES	
BASF2834	SHAW	USA 5620644	4/15/2014	FLOW DISTRIBUTION PLATES	
BASF2834	SHAW	USA 5575063	11/19/2013	FLOW DISTRIBUTION PLATES	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF2835	SHAW	CANA 1317719		PROFILED MULTI-COMPONENT FIBERS AND METHOD AND APPARATUS FOR MAKING SAME	A METHOD FOR EXTRUDING A WIDE VARIETY OF PLURAL-COMPONENT FIBER CONFIGURATIONS IN A SPIN PACK UTILIZES ONE OR MORE DISPOSABLE DISTRIBUTOR PLATES IN WHICH DISTRIBUTOR FLOW PATHS ARE ETCHED ON ONE OR BOTH SIDES TO DISTRIBUTE THE POLYMER COMPONENTS TO APPROPRIATE SPINNERET INLET HOLE LOCATIONS. THE ETCHING PROCESS PERMITS THE DISTRIBUTION PATHS TO BE SUFFICIENTLY SMALL TO FACILITATE ISSUING MULTIPLE DISCRETE POLYMER COMPONENT STREAMS AXIALLY INTO EACH SPINNERET ORIFICE INLET HOLE, WHEREBY THE RESULTING EXTRUDED FIBER CAN BE MADE UP OF AT LEAST ONE HUNDRED SIDE-BY-SIDE SUB-FIBERS. IF THE ADJACENT SUB-FIBERS ARE WEAKLY BONDED, THEY CAN BE READILY SEPARATED BY AGITATION TO SIGNIFICANTLY INCREASE THE EFFECTIVE YIELD FROM THE SPIN PACK AND PROVIDE VERY FINE AND UNIFORM FIBERS.
BASF2835	SHAW	USA 5162074	11/10/2009	PROFILED MULTI-COMPONENT FIBERS AND METHOD AND APPARATUS FOR MAKING SAME	
BASF2835	SHAW	USA 5344297	9/6/2011	PROFILED MULTI-COMPONENT FIBERS AND METHOD AND APPARATUS FOR MAKING SAME	
BASF2835	SHAW	USA 5466410	11/14/2012	PROFILED MULTI-COMPONENT FIBERS AND METHOD AND APPARATUS FOR MAKING SAME	
BASF2835	SHAW	USA 5562930	10/8/2013	PROFILED MULTI-COMPONENT FIBERS AND METHOD AND APPARATUS FOR MAKING SAME	
BASF2835	SHAW	USA 5551588	9/3/2013	PROFILED MULTI-COMPONENT FIBERS AND METHOD AND APPARATUS FOR MAKING SAME	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF4540	SHAW	CANA 2105099			DESCRIBED IS A SPINNERETTE PLATE FOR THE MANUFACTURE OF MULTILOBAL FIBERS WHICH AT LEAST HAS ONE OPENING HAVING A PLURALITY OF LOBES, EACH LOBE HAVING TWO ENDS, ONE END BEING CONNECTED TO THE OTHER LOBES, THE OTHER END OF EACH THE LOBES RADIATING OUTWARDLY AND EACH LOBE HAVING A PLURALITY OF PROJECTIONS ALTERNATING ALONG THE CONTOUR OF EACH LOBE.
BASF4540	SHAW	USA 5263845	10/27/2012	SPINNERETTE PLATE FOR THE MANUFACTURE OF MULTILOBAL FIBERS WITH PROJECTIONS ON EACH LOBE	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF4738	Shaw	BELG EP0595157	10/19/13	MULTILOBA FIBER WITH PROJECTIONS ON EACH LOBE FOR CARPET YARNS	DESCRIBED IS A SYNTHETIC FIBER FOR USE IN CARPETS HAVING A MULTILOBA CROSS SECTION, EACH LOBE OF SAID MULTILOBA CROSS SECTION HAVING A FIRST END AND A SECOND END AND A ONE SIDE AND AN OPPOSITE SIDE, THE FIRST END OF EACH OF SAID LOBES BEING CONNECTED TO THE FIRST END OF THE OTHER LOBES, THE SECOND END OF EACH OF SAID LOBES RADIATING OUTWARDLY, EACH LOBE HAVING A PLURALITY OF PROJECTIONS SUCH THAT EACH PROJECTION OF ONE SIDE OF EACH LOBE HAS NO DIRECT COUNTERPART ON THE OPPOSITE SIDE OF SAID LOBE, AND WHEREIN THE FIBERS HAS A MODIFICATION RATIO OF FROM ABOUT 2.5 TO ABOUT 7.
BASF4738	Shaw	CANA 2105098	8/30/13	MULTILOBA FIBER WITH PROJECTIONS ON EACH LOBE FOR CARPET YARNS	
BASF4738	Shaw	FRAN EP0595157	10/19/13	MULTILOBA FIBER WITH PROJECTIONS ON EACH LOBE FOR CARPET YARNS	
BASF4738	Shaw	GERM P69307456.6	10/19/13	MULTILOBA FIBER WITH PROJECTIONS ON EACH LOBE FOR CARPET YARNS	
BASF4738	Shaw	GBRI EP0595157	10/19/13	MULTILOBA FIBER WITH PROJECTIONS ON EACH LOBE FOR CARPET YARNS	
BASF4738	Shaw	ITAL EP0595157	10/19/13	MULTILOBA FIBER WITH PROJECTIONS ON EACH LOBE FOR CARPET YARNS	
BASF4738	Shaw	NETH EP0595157	10/19/13	MULTILOBA FIBER WITH PROJECTIONS ON EACH LOBE FOR CARPET YARNS	
BASF4738	Shaw	SWITZ EP0595157	10/19/13	MULTILOBA FIBER WITH PROJECTIONS ON EACH LOBE FOR CARPET YARNS	
BASF4738	Shaw	USA 01 US5387469	10/27/12	MULTILOBA FIBER WITH PROJECTIONS ON EACH LOBE FOR CARPET YARNS	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF6000	Shaw	CANA 2199058	3/3/17	STAIN RESISTANT BICOMPONENT FIBER	AN ACID-DYE AND COFFEE STAIN RESISTANT CARPET HAS SHEATH/CORE BICOMPONENT FACE FIBERS AFFIXED IN A BACKING MATERIAL AND BOUND THERETO. THE FACE FIBERS HAVE A CORE OF A FIRST POLYAMIDE COMPONENT AND A SHEATH WHICH SUBSTANTIALLY OR COMPLETELY COVERS THE CORE OF A SECOND POLYAMIDE COMPONENT WHICH IS INHERENTLY CHEMICALLY COMPATIBLE WITH THE FIRST POLYAMIDE COMPONENT. IN AN UNCOLORED STATE, THE CARPET HAS A RED DRINK STAINING DEPTH OF LESS THAN 15 CIE DELTA-E UNITS AND A COFFEE STAINING DEPTH OF LESS THAN ABOUT 10 CIE DELTA-E UNITS.
BASF6000	Shaw	MEXI 226822	9/16/16	STAIN RESISTANT BICOMPONENT FIBER	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF6012	Shaw	USA US5485967	2/3/14	YARN WINDING APPARATUS WITH MANIFOLD ASSEMBLY MOVABLE BETWEEN BLOWING AND STANDBY POSITIONS RELATIVE TO A PAIR OF BOBBIN CARRYING SPINDLES	A MANIFOLD, WHICH HAS A MANIFOLD ASSEMBLY WITH A MULTIPLICITY OF JETS, WHICH IS CONNECTED TO A DRIVE FOR MOVING THE MANIFOLD ASSEMBLY IN A STAND-BY POSITION AND IN A BLOWING POSITION, AND A YARN WINDING APPARATUS FOR WINDING YARN PACKAGES, WHICH HAS A FRAME, A TURRET DISC, ROTATABLY MOUNTED ON THE FRAME, A MULTIPLICITY OF SPINDLES, ROTATABLY MOUNTED ON THE TURRET DISC FOR HOLDING BOBBINS, A TRANSFER MECHANISM, CONNECTED TO THE FRAME, A WINDER HEAD WITH A DRIVE ROLL FOR ROTATING THE SPINDLES, CONNECTED TO THE FRAME, AND THE MANIFOLD, FIXEDLY MOUNTED ON THE FRAME. THE MANIFOLD PROVIDES AN AIR CURTAIN WITHIN THE YARN WINDING APPARATUS IN ORDER TO REDUCE ENTANGLEMENT OF THE LOOSE END OF A FULLY WOUND YARN PACKAGE WITH A NEW WINDING YARN PACKAGE OR OTHER PARTS OF THE YARN WINDING APPARATUS

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF6031	Shaw	USA US5522580	6/4/13	REMOVING STAINS FROM FIXED ITEMS	A METHOD FOR REMOVING VARIOUS STAINS FROM STAINED FIXED ITEMS USES AN AQUEOUS CLEANING COMPOSITION HAVING A PH OF AT LEAST ABOUT 9.0 AND COMPOSED OF UP TO ABOUT 30 PERCENT BY TOTAL COMPOSITION WEIGHT OF A WETTING AGENT CONTAINING 1 TO ABOUT 5 CARBON ATOMS; BETWEEN ABOUT 3 AND ABOUT 15 PERCENT BY TOTAL COMPOSITION WEIGHT OF A PEROXYHYDRATE OXIDIZING AGENT; AND A PH ADJUSTMENT SUBSTANCE

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF6066	SHAW	ASTL 735680		COLORS BICOMPONENT FIBERS	COLORS BICOMPONENT FILAMENTS HAVE A PARTICULATE COLORANT DISPERSED THROUGHOUT ONE OF THE FIBER DOMAINS WHILE ANOTHER OF THE FIBER DOMAINS IS COLORANT-FREE. MORE SPECIFICALLY, THE FILAMENTS HAVE AT LEAST TWO DISTINCT COMPONENTS ARRANGED LONGITUDINALLY COEXTENSIVE WITH ONE ANOTHER. THE ARRANGEMENT OF THE COMPONENTS MAY BE A SHEATH/CORE STRUCTURE OR A SIDE-BY-SIDE STRUCTURE. ONE OF THE COMPONENTS CONTAINS A COLORANT AND THE OTHER ONE DOES NOT (I.E., IS COLORANT FREE). THE COLORANT-FREE COMPONENT IS MOST PREFERABLY FORMED OF A POLYMERIC MATERIAL WHICH IS INCOMPATIBLE WITH THE PARTICULATE COLORANT, WHEREAS THE COLORANT-CONTAINING COMPONENT IS MOST PREFERABLY FORMED OF A POLYMERIC MATERIAL WHICH IS COMPATIBLE WITH THE PARTICULATE COLORANT.
BASF6066	SHAW	BELG 899364		COLORS BICOMPONENT FIBERS	
BASF6066	SHAW	CANA 2242203		COLORS BICOMPONENT FIBERS	
BASF6066	SHAW	FRAN 899364		COLORS BICOMPONENT FIBERS	
BASF6066	SHAW	GBRI 899364		COLORS BICOMPONENT FIBERS	
BASF6066	SHAW	ITAL 899364		COLORS BICOMPONENT FIBERS	
BASF6066	SHAW	MEXI 200512		COLORS BICOMPONENT FIBERS	
BASF6066	SHAW	NETH 899364		COLORS BICOMPONENT FIBERS	
BASF6066	SHAW	SWIT 899364		COLORS BICOMPONENT FIBERS	
BASF6066	SHAW	USA 5886651	8/25/2017	COLORS BICOMPONENT FIBERS	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF6127	SHAW	ASTL 710734		NOVEL POLYAMIDE-POLYOLEFIN BICOMPONENT FIBERS AND METHODS OF MAKING SAME	THE PRESENT INVENTION PROVIDES A PROCESS FOR PRODUCING YARN HAVING REDUCED HEATSET SHRINKAGE. PREFERABLY, THE FIBERS USED IN MAKING THE YARN ARE BICOMPONENT FIBERS. THE PRESENT INVENTION ALSO PROVIDES A PROCESS FOR PRODUCING YARN HAVING REDUCED HEATSET SHRINKAGE AT REDUCED HEAT TEMPERATURES.
BASF6127	SHAW	CANA 2208494		NOVEL POLYAMIDE-POLYOLEFIN BICOMPONENT FIBERS AND METHODS OF MAKING SAME	
BASF6127	SHAW	MEXI 227420		NOVEL POLYAMIDE-POLYOLEFIN BICOMPONENT FIBERS AND METHODS OF MAKING SAME	
BASF6127	SHAW	USA 6881468	10/3/2016	NOVEL POLYAMIDE-POLYOLEFIN BICOMPONENT FIBERS AND METHODS OF MAKING SAME	
BASF6127	SHAW	USA 6528139	10/3/2016	NOVEL POLYAMIDE-POLYOLEFIN BICOMPONENT FIBERS AND METHODS OF MAKING SAME	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF6178	Shaw	USA US6033609	10/28/17	DEVICE AND METHOD TO PREVENT SPINNERET HOLE CONTAMINATION	A SPIN POT FOR SPINNING SYNTHETIC POLYMER FIBERS HAS A POLYMER FILTER, A SPINNERET DOWNSTREAM OF THE POLYMER FILTER, AND AN ELECTROFORMED PERFORATED SCREEN POSITIONED BETWEEN THE POLYMER FILTER AND THE SPINNERET. THE SCREEN IS MOST PREFERABLY ELECTROFORMED NICKEL AND INCLUDES AN ANNULAR NON-PERFORATED REGION WHICH BOUNDS A PERFORATED CENTRAL REGION. THE ELECTROFORMED PERFORATIONS PREVENT DEBRIS THAT MAY BECOME DISLODGED FROM THE FILTER UNIT FROM BLOCKING THE SPINNERET ORIFICES THEREBY CREATING UNDESIED "SLOW-HOLES".

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF6186	SHAW	CANA 2208493		BIOCOMPONENT FIBERS HAVING DISTINCT CRYSTALLINE AND AMORPHOUS POLYMER DOMAINS AND METHOD MAKING SAME	NOVEL BICOMPONENT FIBERS HAVE A POLYAMIDE DOMAIN AND AN AMORPHOUS NON-FIBER-FORMING POLYMER DOMAIN WHICH IS EMBEDDED ENTIRELY WITHIN, AND THEREBY COMPLETELY SURROUNDED BY, THE POLYAMIDE DOMAIN. THE PREFERRED BICOMPONENT FIBERS HAVE A SHEATH-CORE STRUCTURE WHEREIN THE POLYAMIDE DOMAIN CONSTITUTES THE SHEATH AND THE AMORPHOUS NON-FIBER-FORMING POLYMER CONSTITUTES THE CORE. SURPRISINGLY, EVEN THOUGH THE CORE IS FORMED OF A NON-FIBER-FORMING POLYMER, THE BICOMPONENT FIBERS EXHIBIT PROPERTIES WHICH ARE COMPARABLE IN MANY RESPECTS TO FIBERS FORMED FROM 100% POLYAMIDE. PREFERABLY, THE FIBERS ARE CONCENTRIC SHEATH-CORE BICOMPONENT FIBERS HAVING A NYLON SHEATH AND A CORE FORMED FROM POLYSTYRENE, POLYISOBUTENE AND POLY(METHYL METHACRYLATE). POLYSTYRENE, AND PARTICULARLY ATACTIC POLYSTYRENE, IS PREFERRED AS THE AMORPHOUS POLYMER DOMAIN.
BASF6186	SHAW	MEXI 200501		BIOCOMPONENT FIBERS HAVING DISTINCT CRYSTALLINE AND AMORPHOUS POLYMER DOMAINS AND METHOD MAKING SAME	
BASF6186	SHAW	USA 5780156	10/3/2016	BIOCOMPONENT FIBERS HAVING DISTINCT CRYSTALLINE AND AMORPHOUS POLYMER DOMAINS AND METHOD MAKING SAME	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF6195	SHAW	CANA 2214189		NOVEL BICOMPONENT FIBERS HAVING CORE DOMAIN FORMED OF REGENERATED POLYMERIC MATERIALS AND METHODS OF MAKING THE SAME	NOVEL BICOMPONENT FIBERS HAVE A POLYAMIDE DOMAIN AND A CONTAMINANT-CONTAINING POLYMER DOMAIN WHICH IS EMBEDDED ENTIRELY WITHIN, AND THEREBY COMPLETELY SURROUNDED BY, THE POLYAMIDE DOMAIN. THE PREFERRED BICOMPONENT FIBERS HAVE A SHEATH-CORE STRUCTURE WHEREIN THE POLYAMIDE DOMAIN CONSTITUTES THE SHEATH AND THE CONTAMINANT-CONTAINING POLYMER CONSTITUTES THE CORE. SURPRISINGLY, EVEN THOUGH THE CORE IS FORMED OF A CONTAMINANT-CONTAINING POLYMER (WHICH IS DIFFICULTLY SPINNABLE), THE BICOMPONENT FIBERS ARE READILY SPINNABLE AND EXHIBIT PROPERTIES WHICH ARE COMPARABLE IN MANY RESPECTS TO FIBERS FORMED FROM 100% POLYAMIDE. PREFERABLY, THE FIBERS ARE CONCENTRIC SHEATH-CORE BICOMPONENT FIBERS HAVING AN UNCONTAMINATED NYLON-6 SHEATH AND A CORE FORMED FROM NYLON-6 HAVING A RELATIVELY HIGH LEVEL OF CONTAMINATION IN THE FORM OF THE CYCLIC DIMER OF CAPROLACTAM AND/OR NYLON-6 DERIVED FROM COLORED REGENERATED POST-CONSUMER NYLON CARPET FIBERS.
BASF6195	SHAW	MEXI 200503		NOVEL BICOMPONENT FIBERS HAVING CORE DOMAIN FORMED OF REGENERATED POLYMERIC MATERIALS AND METHODS OF MAKING THE SAME	
BASF6195	SHAW	USA 5885705	12/29/2017	BICOMPONENT FIBERS HAVING CONTAMINANT-CONTAINING CORE DOMAIN AND METHODS OF MAKING THE SAME	
BASF6195	SHAW	USA 6039903	1/10/2017	PROCESS OF MAKING A BICOMPONENT FIBER	
BASF6195	SHAW	USA 6004674	1/10/2017	PROCESS OF MAKING A BICOMPONENT FIBER	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF6196	SHAW	CANA 2214194		MULTIPLE DOMAIN FIBERS HAVING INTER-DOMAIN BOUNDARY COMPATIBILIZING LAYER AND METHODS OF MAKING THE SAME	MULTICOMPONENT FIBERS AND METHODS OF PRODUCING THE SAME ARE PROVIDED SUCH THAT AN INTER-DOMAIN BOUNDARY LAYER IS INTERPOSED BETWEEN DISTINCT DOMAINS FORMED OF INCOMPATIBLE POLYMERS SO AS TO MINIMIZE (IF NOT ELIMINATE ENTIRELY) SEPARATION OF THE DOMAINS AT THEIR INTERFACIAL BOUNDARY. THE POLYMER FORMING THE INTER-DOMAIN BOUNDARY LAYER THEREFORE IS PROVIDED SO AS TO BE COMPATIBLE WITH THE OTHERWISE INCOMPATIBLE POLYMERS FORMING EACH OF THE DOMAINS BETWEEN WHICH IT IS INTERPOSED
BASF6196	SHAW	MEXI 200502		MULTIPLE DOMAIN FIBERS HAVING INTER-DOMAIN BOUNDARY COMPATIBILIZING LAYER AND METHODS OF MAKING THE SAME	
BASF6196	SHAW	USA 5932346	1/7/2018	MULTIPLE DOMAIN FIBERS HAVING INTER-DOMAIN BOUNDARY COMPATIBILIZING LAYER AND METHODS OF MAKING THE SAME	
BASF6196	SHAW	USA 6162382	1/10/2017	MULTIPLE DOMAIN FIBERS HAVING INTER-DOMAIN BOUNDARY COMPATIBILIZING LAYER AND METHODS OF MAKING THE SAME	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF6255	SHAW	ASTL 762533		DYED POLYAMIDE ARTICLES WITH IMPROVED RESISTANCE TO OZONE FADING	AN OZONE FADE RESISTANT DYED CARPET MADE OF DYED SHEATH/CORE FACE FIBERS HAS A SHEATH SUBSTANTIALLY OR COMPLETELY COVERING THE CORE. THE SHEATH IS COMPOSED OF A FIBER-FORMING POLYMER WHICH IS INHERENTLY CHEMICALLY COMPATIBLE AND IS SELECTED FROM POLYMERS THAT ARE RESISTANT TO DYE MIGRATION AND YET INHERENTLY CHEMICALLY COMPATIBLE WITH THE CORE POLYMER. THE FACE FIBERS ARE DYED WITH AT LEAST ONE ACID DYE, BASIC DYE OR DISPERSE DYE AND RESIST OZONE FADING AS INDICATED BY A CIEL*A*B* TOTAL COLOR DIFFERENCE FROM THE ORIGINAL UNEXPOSED SAMPLE AFTER AT LEAST 3 CYCLES OF OZONE FADING THAT IS LESS THAN ONE-HALF OF THE CIEL*A*B* TOTAL COLOR DIFFERENCE SEEN FOR A FIBER COMPOSED SUBSTANTIALLY COMPLETELY OF SAID CORE POLYAMIDE COMPONENT THAT IS DYED WITH THE SAME DYES. THE FIBERS MAY BE CABLED AND HEATSET IN WHICH CASE EVEN MORE SUBSTANTIAL IMPROVEMENT IN THE OZONE FASTNESS IS OBSERVED.
BASF6255	SHAW	ASTL 783453		DYED POLYAMIDE ARTICLES WITH IMPROVED RESISTANCE TO OZONE FADING	
BASF6255	SHAW	ATRA EP0982415		DYED POLYAMIDE ARTICLES WITH IMPROVED RESISTANCE TO OZONE FADING	
BASF6255	SHAW	BELG EP0982415		DYED POLYAMIDE ARTICLES WITH IMPROVED RESISTANCE TO OZONE FADING	
BASF6255	SHAW	CANA 2383870		DYED POLYAMIDE ARTICLES WITH IMPROVED RESISTANCE TO OZONE FADING	
BASF6255	SHAW	CHIN ZL99118130.1		DYED POLYAMIDE ARTICLES WITH IMPROVED RESISTANCE TO OZONE FADING	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF6255	SHAW	DENM EP0982415		DYED POLYAMIDE ARTICLES WITH IMPROVED RESISTANCE TO OZONE FADING	
BASF6255	SHAW	FRAN EP0982415		DYED POLYAMIDE ARTICLES WITH IMPROVED RESISTANCE TO OZONE FADING	
BASF6255	SHAW	GBRI EP0982415		DYED POLYAMIDE ARTICLES WITH IMPROVED RESISTANCE TO OZONE FADING	
BASF6255	SHAW	GERM 69910925.6		DYED POLYAMIDE ARTICLES WITH IMPROVED RESISTANCE TO OZONE FADING	
BASF6255	SHAW	ITAL EP0982415		DYED POLYAMIDE ARTICLES WITH IMPROVED RESISTANCE TO OZONE FADING	
BASF6255	SHAW	NETH EP0982415		DYED POLYAMIDE ARTICLES WITH IMPROVED RESISTANCE TO OZONE FADING	
BASF6255	SHAW	SPAI EP0982415		DYED POLYAMIDE ARTICLES WITH IMPROVED RESISTANCE TO OZONE FADING	
BASF6255	SHAW	SWED EP0982415		DYED POLYAMIDE ARTICLES WITH IMPROVED RESISTANCE TO OZONE FADING	
BASF6255	SHAW	SWIT EP0982415		DYED POLYAMIDE ARTICLES WITH IMPROVED RESISTANCE TO OZONE FADING	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF6255	SHAW	USA 6531218	9/19/2016	DYED POLYAMIDE ARTICLES WITH IMPROVED RESISTANCE TO OZONE FADING	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF6258	SHAW	CANA 2280250		ALLOY FIBERS WITH REDUCED HEATSET SHRINKAGE	A CARPET YARN IS A PLURALITY OF FIBERS SPUN FROM A MULTICONSTITUENT POLYMER ALLOY COMPOSED OF 60 WEIGHT PERCENT OR MORE OF NYLON 6; UP TO ABOUT 37 WEIGHT PERCENT OF A STEREOREGULAR POLYOLEFIN HAVING A MELT FLOW INDEX OF FROM ABOUT 2 TO ABOUT 100; AND 3 - 37 WEIGHT PERCENT OF A POLYOLEFIN THAT IS AT LEAST PARTIALLY MODIFIED BY ONE OR MORE TYPE OF POLAR MONOMER. UPON STEAM HEATSETTING AT ABOUT 124°C, THE YARN SHRINKS LESS THAN ABOUT 20%.
BASF6258	SHAW	USA 6132839	12/4/2018	ALLOY FIBERS WITH REDUCED HEATSET SHRINKAGE	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF6264	Shaw	ASTL 749683	12/7/18	SELF-SETTING YARN	A SELF-SET YARN MADE FROM BICOMPONENT FIBERS FORMS HELICAL CRIMPS THAT LOCK IN TWIST AND FORM BULK.
BASF6264	Shaw	BELG EP0921219	12/4/18	SELF-SETTING YARN	
BASF6264	Shaw	CANA 2253698	12/4/18	SELF-SETTING YARN	
BASF6264	Shaw	CHIN 98127194	12/5/18	SELF-SETTING YARN	
BASF6264	Shaw	FRAN EP0921219	12/4/18	SELF-SETTING YARN	
BASF6264	Shaw	GERM P69808413.6	12/4/18	SELF-SETTING YARN	
BASF6264	Shaw	GBRI EP0921219	12/4/18	SELF-SETTING YARN	
BASF6264	Shaw	ITAL EP0921219	12/4/18	SELF-SETTING YARN	
BASF6264	Shaw	MEXI 227459	12/3/18	SELF-SETTING YARN	
BASF6264	Shaw	NETH EP0921219	12/4/18	SELF-SETTING YARN	
BASF6264	Shaw	SWITZ EP0921219	12/4/18	SELF-SETTING YARN	
BASF6264	Shaw	USA US6158204	12/4/18	SELF-SETTING YARN	
BASF6264	Shaw	USA US6705069	12/5/17	SELF-SETTING YARN	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF6277	Shaw	CANA (pending appln)		PROCESSES AND SYSTEMS FOR MAKING SYNTHETIC BULKED CONTINUOUS FILAMENT YARNS	PROCESSES AND APPARATUS ARE PROVIDED WHEREBY THE MORPHOLOGY OF BULKED CONTINUOUS FILAMENT (BCF) YARNS CAN BE VARIABLY CONTROLLED. MORE SPECIFICALLY, ACCORDING TO THE PRESENT INVENTION, THE BCF YARN IS MELT-SPUN, DRAWN AND TEXTURED. MOST PREFERABLY IN A ONE-STEP SPIN-DRAW-TEXTURE (SDT) PROCESS, WHEREIN PRIOR TO TEXTURING, THE YARN IS SUBJECTED TO A DIFFERENTIAL TEMPERATURE CONDITION. MOST PREFERABLY, SUCH DIFFERENTIAL TEMPERATURE CONDITION IS ACCOMPLISHED USING THE DUO ROLLS EMPLOYED IN DRAWING THE BCF, SUCH THAT ONE OF THE ROLLS IS MAINTAINED AT A GREATER TEMPERATURE AS COMPARED TO THE OTHER OF THE ROLLS. MOST PREFERABLY, IT IS THE UPSTREAM-MOST ROLL (RELATIVE TO THE GENERAL CONVEYANCE PATH OF THE FILAMENT TOWARD THE TEXTURIZER) WHICH IS THE HOTTER OF THE DUO ROLLS.
BASF6277	Shaw	USA US6447703	6/22/20	PROCESSES AND SYSTEMS FOR MAKING SYNTHETIC BULKED CONTINUOUS FILAMENT YARNS	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
BASF6278	SHAW	FRAN EP1268892		HIGH SPEED SPINNING OF SHEATH/CORE BICOMPONENT FIBERS	PROCESSES WHEREBY SHEATH/CORE BICOMPONENT FIBERS ARE MELT-SPUN AT RELATIVELY HIGH SPINNING RATES. IN PARTICULARLY PREFERRED FORMS, POLYAMIDE SHEATH/CORE BICOMPONENT FIBERS ARE MADE AT MELT-SPINNING SPEEDS OF ABOUT 4000 METERS PER MINUTE OR GREATER, AND MORE PREFERABLY ABOUT 4500 METERS PER MINUTE OR GREATER. MOST PREFERABLY, THE SHEATH IS FORMED OF NYLON 6,12 WHILE THE CORE IS FORMED OF NYLON 6.
BASF6278	SHAW	GBRI EP1268892		HIGH SPEED SPINNING OF SHEATH/CORE BICOMPONENT FIBERS	
BASF6278	SHAW	GERM 60016808.5		HIGH SPEED SPINNING OF SHEATH/CORE BICOMPONENT FIBERS	
BASF6278	SHAW	ITAL EP1268892		HIGH SPEED SPINNING OF SHEATH/CORE BICOMPONENT FIBERS	
BASF6278	SHAW	TAIW NI186010		HIGH SPEED SPINNING OF SHEATH/CORE BICOMPONENT FIBERS	
BASF6278	SHAW	USA 6332994	2/14/2020	HIGH SPEED SPINNING OF SHEATH/CORE BICOMPONENT FIBERS	

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FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
H0002380	Shaw	ASTL (pending appln)		SOFT HAND, LOW LUSTER, HIGH BODY CARPET FILAMENTS	NOVEL FILAMENTS AND YARNS FOR CARPETS, UPHOLSTERY AND OTHER APPLICATIONS, THE SPINNERET AND METHOD FOR THEIR PRODUCTION AND CARPETS MANUFACTURED THEREFROM. THE FILAMENTS OF THE INVENTION ARE SOLID MULTI-LOBAL FILAMENTS OF COMPLEX CONVEX-CONCAVE SURFACE CONTOUR POSSESSING LOW LUSTER, LOW MOMENT OF INERTIA, HIGH COLOR INTENSITY UPON DYEING AND HIGH COVERING POWER. CARPETS MANUFACTURED THEREFROM POSSESS LOW LUSTER, SOFT HAND, HIGH COVERING POWER AND HIGH BODY
H0002380	Shaw	ASTL 01 (pending appln)		SOFT HAND, LOW LUSTER, HIGH BODY CARPET FILAMENTS	SUITABLE FOR PREMIUM RESIDENTIAL APPLICATION. THE FILAMENTS OF THE INVENTION ARE PRODUCED AT HIGH THROUGHPUT AND PRODUCTIVITY BY THE METHOD OF THE INVENTION.
H0002380	Shaw	CANA (pending appln)		SOFT HAND, LOW LUSTER, HIGH BODY CARPET FILAMENTS	
H0002380	Shaw	CHIN ZL03808193.8		SOFT HAND, LOW LUSTER, HIGH BODY CARPET FILAMENTS	
H0002380	Shaw	EPC (pending appln)		SOFT HAND, LOW LUSTER, HIGH BODY CARPET FILAMENTS	
H0002380	Shaw	USA US6673450	2/11/22	SOFT HAND, LOW LUSTER, HIGH BODY CARPET FILAMENTS	

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CARPET FIBERS (SBE 4580)

FILE #	LICENSED TO	COUNTRY	EXPIRATION DATE	Title	Abstract
H0007760	Shaw	USA (pending appln 11/120179)		CARPET YARN DESENSITIZED TO VARIABLE AMBIENT ENVIRONMENTAL CONDITIONS AND METHODS AND SYSTEMS OF MAKING THE SAME	THE YARN IS DESENSITIZED BY USING THE HIGHEST POSSIBLE DRAW RATIO, THE GREATEST POSSIBLE MOISTURE CONTENT OBTAINED BY USING THE NEWLY AVAILABLE GEAR TYPE OF WATER PUMPS, AND THE HIGHEST POSSIBLE DUO 2 TEMPERATURE THAT CAN BE USED WITHOUT FLASHING OFF THE FINISH OR MELTING THE YARN. THESE CONDITIONS PRODUCE A YARN WITH A 19% BULK (WET BULK) VS NORMAL YARN WITH A 13% BULK AS EACH OF THE DUO 2 HIGH HEAT AND THE HIGHER DRAW RATIO CONDITIONS INCREASE BULK. THIS MAKES A VISUALLY DESENSITIZED CARPET THAT SHOWS FEW STREAKS AT YEAR ROUND CONDITIONS IF PROPERLY LAGGED AT CONDITION BEFORE TUFTING. IF NOT, WINTER TIME EFFECTS CAN OCCUR WHICH SHOW DIFFERENT BULK LEVELS THAT AFFECT CARPET HEIGHT VARIANCES BUT DO NOT CAUSE THE DARK STREAKS THAT WERE THE CAUSE OF MOST OF THE ANNUAL CLAIM DOLLARS.

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Exhibit B
ASSIGNMENT OF PATENTS

HONEYWELL INTERNATIONAL INC., a Delaware corporation, having a place of business at 101 Columbia Road, Morristown, NJ 07962 hereby assign to SHAW INDUSTRIES GROUP, INC., a Georgia corporation, having a place of business at P.O. Drawer 2128, 616 East Walnut Avenue, Dalton, Georgia 30722-2128 ("SHAW") and SHAW hereby accepts, subject to any pre-existing licenses, the patents listed in Schedule A attached to this Assignment, including the right to sue for and recover damages with respect to past infringement of the patents by third parties, both foreign and domestic.

IN WITNESS WHEREOF, the parties have caused these presents to be signed by their duly authorized representative below named.

HONEYWELL INTERNATIONAL INC

By: Yamir D. Nunez

Title: Authorized Officer

May 14, 2009

County of _____)
)
 State of _____) ss:

On this 14th day of May, 2008, before me a Notary Public in and for the County and State aforesaid, personally appeared Vijayar Bhatia, to me known and known to me to be the person of that name, who signed and sealed the foregoing instrument, and acknowledged the same to be of his free act and deed.

Julianne Ireland
Notary Public

(SEAL)

My Commission Expires July 19, 2012

SHAW INDUSTRIES GROUP, INC.

By: H. D. Jones

Title: Executive V.P. Operations

Date: May 8, 2009

County of Murray)
) SS:

State of Georgia)

On this 8th day of May, 2008, before me a Notary Public in and for the County and State aforesaid, personally appeared Wong, to me known and known to me to be the person of that name, who signed and sealed the foregoing instrument, and acknowledged the same to be of his free act and deed.

(SEAL)

My Commission Expires

JULIANNE HOLLAND
NOTARY PUBLIC
STATE OF NEW JERSEY
MY COMMISSION EXPIRES JULY 10, 2012

Unafae Jao

PATENT