

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT3739173

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
DEEPAK AKOLEKAR	11/15/2012
M.J. YANJARAPPA	11/16/2012
PHANI KIRAN BOLLAPRAGADA	11/14/2012
RECEIVING PARTY DATA	
Name:	DOW CHEMICAL INTERNATIONAL PVT. LTD.
Street Address:	1ST FLOOR, BLOCK B, 02, GODREJ IT PARK
Internal Address:	GODREJ BUSINESS DISTRICT, PIROJSHANAGAR, L.B.S. MARG
City:	VIKHROLI-MUMBAI
State/Country:	INDIA
Postal Code:	400 079
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	14426867
CORRESPONDENCE DATA	
Fax Number:	(989)636-3237
<i>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.</i>	
Phone:	9896331963
Email:	fglmfrr@dow.com
Correspondent Name:	BARB STIEVE
Address Line 1:	2040 DOW CENTER
Address Line 4:	MIDLAND, MICHIGAN 48674
ATTORNEY DOCKET NUMBER:	72470-US-PCT
NAME OF SUBMITTER:	BARB STIEVE
SIGNATURE:	/Barb Stieve/
DATE SIGNED:	02/15/2016
Total Attachments: 4	
source=72470-US-PCT 20160215 Inventors to DCI PVT#page1.tif	
source=72470-US-PCT 20160215 Inventors to DCI PVT#page2.tif	
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This Assignment 110 is in the English language and has the same meaning in other languages with the same 110 number and 8022e
 This Assignment 110 is in the English language and has the same meaning in other languages with the same 110 number and 8022e
 FORM 110 (R. 5/97)

INDIVIDUAL ASSIGNMENT AND INVENTOR'S DECLARATION
 (with Priority Rights)

I/we verily believe I am/we are the original, first and sole/joint inventor(s) of the subject matter which is embraced by and for which a patent is sought on the invention entitled: **IONIC LIQUID GRAFTED MESOPOROUS SILICA COMPOSITIONS FOR POLAR GAS/NON-POLAR GAS AND OLEFIN/PARAFFIN SEPARATIONS**

which invention was made and invented by me/us out of and in the course of my/our employment with my/our respective employers as stated below my/our name(s). I/we acknowledge that I/we hold the invention and all patent and other rights and powers obtainable or exercisable in respect thereof in trust for our respective employers. As trustee(s), and for good and valuable consideration and/or the remuneration received for my/our work, I/we sell, assign and transfer unto:

Dow Chemical International PVT. LTD.
 1st Floor, Block B, 02, Godrej IT Park
 Godrej Business District
 Pirojshanagar, L.B.S Marg
 Vikhroli-Mumbai 400 079
 INDIA

a corporation organized and existing under the laws of India (hereinafter referred to as the "Assignee"); my/our entire right, title and interest throughout the world, in and to the invention and all rights and powers to make applications, including provisional applications when permitted by law, for Letters Patent in its own name, or in the name of its designee (or nominee(s)); and all rights and powers to file any corresponding or equivalent applications in any and all countries, including all rights to claim priority under all United States domestic laws, International Convention(s) and Treaties in the name of Assignee, and do hereby authorize Assignee or its designee to insert here the Priority Number, Filing Date, and Filing Country

Priority Number	Filing Date	Filing Country
61708,219	October 1, 2012	United States of America

of the application, on which the claim for priority will be based, and in and to any Letters Patent that may be issued for the invention in any and all countries. I/we do hereby agree to assist Assignee in the prosecution of the application(s) and in any interference, conflict, opposition or litigation which may arise involving the invention or the patent or patents thereon, and to execute for any and all countries any document relating to applications derived from, corresponding to or equivalent to the above identified application as Assignee may request.

I/we authorize Assignee or its designee to translate this Assignment into all languages necessary; and we request that any such Letters Patent be issued to Assignee; and consent to the recordal of this Assignment, or a Notarial True Copy thereof, being under covenant not only that I/we have full power to make the same, but also that such assigned rights are not encumbered by any grant, license, or other right heretofore given.

Subscribed and Declared by me/us:

At: PUNE INDIA
 this 15 day of NOVEMBER, 2012
 Effective as of October 1, 2012

Signature: DS Akolekar
 Full Name: Deepak Akolekar
 Residence: Sri Sri Guru Gauranga Niwas
 56 Girish Society
 Behind Old Warje Jakat naka
 Warje, Maharashtra
 Pune-411052, INDIA

Country: India
 Citizenship: Australia
 P.O. Address: Same as Residence
 Employed By: Dow Chemical International PVT. LTD.
 Of Country: India

At: _____
 this _____ day of _____, 20____
 Effective as of October 1, 2012

Signature: _____
 Full Name: M. J. Yanjarappa
 Residence: Flat Number T-42
 A-3 Block
 Mahaveer Varna
 Kannamangala Whitefield
 Bangalore-67
 INDIA

Country: India
 Citizenship: India
 P.O. Address: Same as Residence
 Employed By: Dow Chemical International PVT. LTD.
 Of Country: India

At: _____
 this _____ day of _____, 20____
 Effective as of October 1, 2012

Signature: _____
 Full Name: Phani Kiran Bollapragada
 Residence: 22, Buena Monte, NCL Society
 Panchvati, Pashan Road
 Pune-411008
 INDIA

Country: India
 Citizenship: India
 P.O. Address: Same as Residence
 Employed By: Dow Chemical International PVT. LTD.
 Of Country: India

At: _____
 this _____ day of _____, 20____
 Effective as of October 1, 2012

Signature: _____
 Full Name: _____
 Residence: _____

Country: _____
 Citizenship: _____
 P.O. Address: _____
 Employed By: _____
 Of Country: _____

() Additional names and signatures are attached.

This Assignment 110 is in the ENGLISH language and has the same meaning in other languages with the same 110 number and RDate.

110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000
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FORM 110 (R. 5/97)

INDIVIDUAL ASSIGNMENT AND INVENTOR'S DECLARATION (with Priority Rights)

I/we verily believe I am/we are the original, first and sole/joint inventor(s) of the subject matter which is embraced by and for which a patent is sought on the invention entitled: **IONIC LIQUID GRAFTED MESOPOROUS SILICA COMPOSITIONS FOR POLAR GAS/NON-POLAR GAS AND OLEFIN/PARAFFIN SEPARATIONS**

which invention was made and invented by me/us out of and in the course of my/our employment with my/our respective employers as stated below my/our name(s). I/we acknowledge that I/we hold the invention and all patent and other rights and powers obtainable or exercisable in respect thereof in trust for our respective employers. As trustee(s), and for good and valuable consideration and/or the remuneration received for my/our work, I/we sell, assign and transfer unto:

Dow Chemical International PVT. LTD.
1st Floor, Block B, 02, Godrej IT Park
Godrej Business District
Pirojshanagar, L.B.S Marg
Vikhroli-Mumbai 400 079
INDIA

a corporation organized and existing under the laws of India (hereinafter referred to as the "Assignee"); my/our entire right, title and interest throughout the world, in and to the invention and all rights and powers to make applications, including provisional applications when permitted by law, for Letters Patent in its own name, or in the name of its designee (or nominee(s)); and all rights and powers to file any corresponding or equivalent applications in any and all countries, including all rights to claim priority under all United States domestic laws, International Convention(s) and Treaties in the name of Assignee, and do hereby authorize Assignee or its designee to insert here the Priority Number, Filing Date, and Filing Country

Priority Number	Filing Date	Filing Country
61/708,219	October 1, 2012	United States of America

of the application, on which the claim for priority will be based; and in and to any Letters Patent that may be issued for the invention in any and all countries. I/we do hereby agree to assist Assignee in the prosecution of the application(s) and in any interference, conflict, opposition or litigation which may arise involving the invention or the patent or patents thereon, and to execute for any and all countries any document relating to applications derived from, corresponding to or equivalent to the above identified application as Assignee may request.

I/we authorize Assignee or its designee to translate this Assignment into all languages necessary; and we request that any such Letters Patent be issued to Assignee; and consent to the recordal of this Assignment, or a Notarial True Copy thereof, being under covenant not only that I/we have full power to make the same, but also that such assigned rights are not encumbered by any grant, license, or other right heretofore given.

Subscribed and Declared by me/us:

At: _____ this _____ day of _____, 20____ Effective as of October 1, 2012
Signature: _____ Full Name: Deepak Akolekar Residence: Sri Sri Guru Gauranga Niwas 56 Girish Society Behind Old Warje Jakat naka Warje, Maharashtra Pune-411052: INDIA
Country: India Citizenship: Australia P.O. Address: Same as Residence Employed By: Dow Chemical International PVT. LTD. Of Country: India

At: <u>Bangalore</u> this <u>16th</u> day of <u>November</u> , 20 <u>12</u> Effective as of October 1, 2012
Signature: <u>M. J. Yanjarappa</u> Full Name: M. J. Yanjarappa Residence: Flat Number T-42 A-3 Block Mahaveer Varna Kannamangala Whitefield Bangalore-67 INDIA
Country: India Citizenship: India P.O. Address: Same as Residence Employed By: Dow Chemical International PVT. LTD. Of Country: India

At: _____ this _____ day of _____, 20____ Effective as of October 1, 2012
Signature: _____ Full Name: Phani Kiran Bollapragada Residence: 22, Buena Monte, NCL Society Panchvati, Pashan Road Pune-411008 INDIA
Country: India Citizenship: India P.O. Address: Same as Residence Employed By: Dow Chemical International PVT. LTD. Of Country: India

At: _____ this _____ day of _____, 20____
Signature: _____ Full Name: _____ Residence: _____
Country: _____ Citizenship: _____ P.O. Address: _____ Employed By: _____ Of Country: _____

() Additional names and signatures are attached

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FORM 110 (Rev. 07)

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1st Floor, Block B, 02, Godrej IT Park
Godrej Business District
Pirojshanagar, L.B.S Marg
Vikhroli-Mumbai 400 079
INDIA

a corporation organized and existing under the laws of India (hereinafter referred to as the "Assignee"); my/our entire right, title and interest throughout the world, in and to the invention and all rights and powers to make applications, including provisional applications when permitted by law, for Letters Patent in its own name, or in the name of its designee (or nominee(s)); and all rights and powers to file any corresponding or equivalent applications in any and all countries, including all rights to claim priority under all United States domestic laws, International Convention(s) and Treaty(s) in the name of Assignee, and do hereby authorize Assignee or its designee to insert here the Priority Number, Filing Date, and Filing Country

Priority Number	Filing Date	Filing Country
61708,219	October 1, 2012	United States of America

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Subscribed and Declared by me/us:

At: _____ this _____ day of _____, 20____ Effective as of October 1, 2012 Signature: _____ Full Name: Deepak Akolekar Residence: Sri Sri Guru Gauranga Niwas 56 Girish Society Behind Old Warje Jakat naka Warje, Maharastra Pune-411052; INDIA Country: India Citizenship: Australia P.O. Address: Same as Residence Employed By: Dow Chemical International PVT. LTD. Of Country: India

At: _____ this _____ day of _____, 20____ Effective as of October 1, 2012 Signature: _____ Full Name: M J. Yanjarappa Residence: Flat Number T-42 A-3 Block Mahaveer Varna Kannamangala Whitefield Bangalore-67 INDIA Country: India Citizenship: India P.O. Address: Same as Residence Employed By: Dow Chemical International PVT. LTD. Of Country: India
--

At: <u>Pune - 411008, Maharashtra, India</u> this <u>14</u> day of <u>November</u> , 20 <u>12</u> Effective as of October 1, 2012 Signature: <u>Phani Kiran Bollapragada</u> Full Name: Phani Kiran Bollapragada Residence: 22, Buena Monte, NCL Society Panchvati, Pashan Road Pune-411008 INDIA Country: India Citizenship: India P.O. Address: Same as Residence Employed By: Dow Chemical International PVT. LTD. Of Country: India
--

At: _____ this _____ day of _____, 20____ Effective as of October 1, 2012 Signature: _____ Full Name: _____ Residence: _____ Country: _____ Citizenship: _____ P.O. Address: _____ Employed By: _____ Of Country: _____

() Additional names and signatures are attached.

SUBSCRIBING WITNESS
AFFIDAVIT OF EXECUTION

(CORPORATE OFFICER)

Print or Type
Name and Address
of Subscribing Witness

I, **Ramolla Karnani**

Whose full post office address is:

DOW CHEMICAL INTERNATIONAL PVT. LTD.
1st Floor, Block B, 02,
Godrej IT Park, Godrej Business District,
Pirojshanagar, L.B.S Marg,
Vikhroli (W), Mumbai – 400 079
India

Print or Type
Name of Corporation
Officer and Title

Make Oath and say that I was personally present and did see:

Vipul S. Shah
President

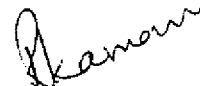
of

DOW CHEMICAL INTERNATIONAL PVT. LTD.
1st Floor, Block B, 02, Godrej IT Park
Godrej Business District
Pirojshanagar, L.B.S Marg
Vikhroli-Mumbai 400 079
India

known or identified to me to be the individual(s) described and who executed the foregoing document and that said individual has full authority to sign the document on behalf of the said limited liability company and that the purposes for which said document is granted are within the scope of the objectives or activities of said limited liability company and acknowledge the same as a free act and deed for uses and purposes therein expressed.

Signed at: Mumbai, India

On this 21st day of November, 2012



Subscribing Witness