501899415 04/25/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------|----------------|
| Pascal Hayoz | 01/02/2012 |
| Bernd Lamatsch | 03/08/2012 |
| Margherita Fontana | 04/18/2012 |
| Stephan Burkhardt | 01/02/2012 |
| Laurent Michau | 04/24/2012 |
| Urs Lehmann | 01/02/2012 |
| Philippe Bugnon | 03/07/2012 |

RECEIVING PARTY DATA

| Name: | BASF SE |
|-----------------|-----------------------|
| Street Address: | CARL BOSCH STRASSE 38 |
| City: | LUDWIGSHAFEN |
| State/Country: | GERMANY |
| Postal Code: | 67056 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13376874 |

CORRESPONDENCE DATA

 Fax Number:
 (914)785-7102

 Phone:
 9147852000

Email: andrea.dececchis@basf.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

via US Mail.

Correspondent Name: BASF Corporation Patent Department

Address Line 1: 500 White Plains Road

Address Line 2: P.O. Box 2005

Address Line 4: Tarrytown, NEW YORK 10591

PATENT

REEL: 028101 FRAME: 0802

133768

501899415

| ATTORNEY DOCKET NUMBER: | C000024008 | |
|---|-------------------|--|
| NAME OF SUBMITTER: | Shiela A. Loggins | |
| Total Attachments: 14 | | |
| source=24008_Bugnon_assign_doc#page1 | .tif | |
| source=24008_Bugnon_assign_doc#page2 | .tif | |
| source=24008_Burkhardt_assign_doc#page | e1.tif | |
| source=24008_Burkhardt_assign_doc#page2.tif | | |
| source=24008_Fontana_assign_doc#page1.tif | | |
| source=24008_Fontana_assign_doc#page2.tif | | |
| source=24008_Hayoz_assign_doc#page1.tif | | |
| source=24008_Hayoz_assign_doc#page2.tif | | |
| source=24008_Lamatsch_assign_doc#page1.tif | | |
| source=24008_Lamatsch_assign_doc#page2.tif | | |
| source=24008_Lehmann_assign_doc#page1.tif | | |
| source=24008_Lehmann_assign_doc#page2.tif | | |
| source=24008_Michau_assign_doc#page1.tif | | |
| source=24008_Michau_assign_doc#page2.tif | | |

PATENT REEL: 028101 FRAME: 0803

<u>ASSIGNMENT</u>

1/We

Pascal Hayoz, Ettingerstrasse 55, 4114 Hofstetten, Switzerland, Citizen of Switzerland; Bernd Lamatsch (deceased), Im Hirshalm 44, 4125 Riehen, Switzerland, Citizen of Germany;

Sole Heir:

Achim Lamatsch, Ernst-Prestel-Strasse 10, 79183 Waldkirch, Germany, Citizen of Germany

Margherita Fontana, Tödistrasse 80, 8800 Thalwil, Switzerland, Citizen of Italy; Stephan Burkhardt, Gansacherweg 42, 4460 Gelterkinden, Switzerland, Citizen of Switzerland; Laurent Michau, 2A rue du Rhin, 68128 Rosenau, France, Citizen of France; Urs Lehmann, Unterer Rheinweg 50, 4057 Basel, Switzerland, Citizen of Switzerland; Philippe Bugnon, Impasse des Rosiers 4, Essert, 1724 Le Mouret, Switzerland, Citizen of Switzerland;

for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, do hereby sell and assign *BASF SE*, 67056 *Ludwigshafen*, *Germany* and its successors, assigns and legal representatives all my/our right, title and interest, in and for the United States of America, in and to the invention entitled:

CHARGED PARTICLES

invented by me/us and described in International application no.

No. PCT/EP2010/058206 filed 11th June 2010

and all United States Letters Patent which may be granted therefor, and all divisions, reissues, continuations and extensions thereof, the said interest being the entire ownership of the said Letters Patent when granted, to be held and enjoyed by the said **BASF SE**, its successors, assigns or other legal representatives, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me/us if this assignment and sale had not been made;

And I/we hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to the said BASFSE.

| | ï | , | |
|---------------------------------------|------------|------|---|
| Pascal Hayoz | * | Date | 77711120 (1,400) |
| | | 1 | |
| (deceased) | | | |
| Bernd Lamatsch | | Date | |
| | | | |
| Achim Lamatsch (Sole Heir) | | Date | *************************************** |
| | | | |
| Margherita Fontana | | Date | |
| | | 1 | |
| Stephan Burkhardt | | Date | |
| | ay ne gra | | |
| USA-T_US Assigment Tarrytown - 250214 | 100 201 20 | | Stand: 03/2011 |

PATENT REEL: 028101 FRAME: 0804

| | rage |
|---|------------|
| | |
| Laurent Michau | Date |
| Urs Lehmann | Date |
| DI B | 07.03.2512 |
| Philippe Bugnon \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Date |

1/We

Pascal Hayoz, Ettingerstrasse 55, 4114 Hofstetten, Switzerland, Citizen of Switzerland; Bernd Lamatsch (deceased), Im Hirshalm 44, 4125 Riehen, Switzerland, Citizen of Germany;

Sole Heir:

Achim Lamatsch, Ernst-Prestel-Strasse 10, 79183 Waldkirch, Germany, Citizen of Germany

Margherita Fontana, Tödistrasse 80, 8800 Thalwil, Switzerland, Citizen of Italy; Stephan Burkhardt, Gansacherweg 42, 4460 Gelterkinden, Switzerland, Citizen of Switzerland; Laurent Michau, 2A rue du Rhin, 68128 Rosenau, France, Citizen of France; Urs Lehmann, Unterer Rheinweg 50, 4057 Basel, Switzerland, Citizen of Switzerland; Philippe Bugnon, Impasse des Rosiers 4, Essert, 1724 Le Mouret, Switzerland, Citizen of Switzerland;

for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, do hereby sell and assign *BASF SE*, 67056 *Ludwigshafen*, *Germany* and its successors, assigns and legal representatives all my/our right, title and interest, in and for the United States of America, in and to the invention entitled:

CHARGED PARTICLES

invented by me/us and described in International application no.

No. PCT/EP2010/058206 filed 11th June 2010

and all United States Letters Patent which may be granted therefor, and all divisions, reissues, continuations and extensions thereof, the said interest being the entire ownership of the said Letters Patent when granted, to be held and enjoyed by the said *BASF SE*, its successors, assigns or other legal representatives, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me/us if this assignment and sale had not been made;

And I/we hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to the said *BASF SE*.

| Pascal Hayoz | Date |
|--------------------------------|----------|
| | |
| (deceased) | |
| Bernd Lamatsch | Date |
| | |
| Achim I constant (Cata IIIain) | |
| Achim Lamatsch (Sole Heir) | Date |
| | |
| Margherita Fontana | Date |
| A | |
| Atephan Blukkatett | 2.1.2017 |
| Stephan Burkhardt | Date |
| | |

USA-T_US Assigment Tarrytown - 250214

| Laurent Michau | <u> </u> | Date | |
|-----------------|-----------|------|--|
| | | | - Committee of the Comm |
| Urs Lehmann | ******* | Date | |
| | Accompany | *** | |
| Philippe Bugnon | | Date | |

Stand: 03/2011

Page 2

i∷ I / We

Pascal Hayoz, Ettingerstrasse 55, 4114 Hofstetten, Switzerland, Citizen of Switzerland; **Bernd Lamatsch (deceased)**, Im Hirshalm 44, 4125 Riehen, Switzerland, Citizen of Germany;

Sole Heir:

Achim Lamatsch, Ernst-Prestel-Strasse 10, 79183 Waldkirch, Germany, Citizen of Germany

Margherita Fontana, Tödistrasse 80, 8800 Thalwil, Switzerland, Citizen of Italy; Stephan Burkhardt, Gansacherweg 42, 4460 Gelterkinden, Switzerland, Citizen of Switzerland; Laurent Michau, 2A rue du Rhin, 68128 Rosenau, France, Citizen of France; Urs Lehmann, Unterer Rheinweg 50, 4057 Basel, Switzerland, Citizen of Switzerland; Philippe Bugnon, Impasse des Rosiers 4, Essert, 1724 Le Mouret, Switzerland, Citizen of Switzerland;

for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, do hereby sell and assign *BASF SE*, 67056 *Ludwigshafen*, *Germany* and its successors, assigns and legal representatives all my/our right, title and interest, in and for the United States of America, in and to the invention entitled:

CHARGED PARTICLES

invented by me/us and described in International application no.

No. PCT/EP2010/058206

81.

filed 11th June 2010

and all United States Letters Patent which may be granted therefor, and all divisions, reissues, continuations and extensions thereof, the said interest being the entire ownership of the said Letters Patent when granted, to be held and enjoyed by the said **BASF SE**, its successors, assigns or other legal representatives, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me/us if this assignment and sale had not been made;

And I/we hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to the said **BASF SE**.

| \hat{s}_{ij} . | of the desired of the second |
|----------------------------|------------------------------|
| Pascal Hayoz | Date |
| (deceased) | |
| Bernd Lamatsch | Date |
| i | |
| Achim Lamatsch (Sole Heir) | Date |
| Ma Ma Fetan | 1804.2012 |
| Margherita Fontana | Date |
| E V | the other growing |
| Stephan Burkhardt | Date |

USA-T_US Assigment Tarrytown - 250214

1911

Page 2

I/We

Pascal Hayoz, Ettingerstrasse 55, 4114 Hofstetten, Switzerland, Citizen of Switzerland; Bernd Lamatsch (deceased), Im Hirshalm 44, 4125 Riehen, Switzerland, Citizen of Germany;

Sole Heir:

Achim Lamatsch, Ernst-Prestel-Strasse 10, 79183 Waldkirch, Germany, Citizen of Germany

Margherita Fontana, Tödistrasse 80, 8800 Thalwil, Switzerland, Citizen of Italy; Stephan Burkhardt, Gansacherweg 42, 4460 Gelterkinden, Switzerland, Citizen of Switzerland; Laurent Michau, 2A rue du Rhin, 68128 Rosenau, France, Citizen of France; Urs Lehmann, Unterer Rheinweg 50, 4057 Basel, Switzerland, Citizen of Switzerland; Philippe Bugnon, Impasse des Rosiers 4, Essert, 1724 Le Mouret, Switzerland, Citizen of Switzerland;

for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, do hereby sell and assign *BASF SE*, 67056 *Ludwigshafen*, *Germany* and its successors, assigns and legal representatives all my/our right, title and interest, in and for the United States of America, in and to the invention entitled:

CHARGED PARTICLES

invented by me/us and described in International application no.

No. PCT/EP2010/058206 filed 11th June 2010

and all United States Letters Patent which may be granted therefor, and all divisions, reissues, continuations and extensions thereof, the said interest being the entire ownership of the said Letters Patent when granted, to be held and enjoyed by the said *BASF SE*, its successors, assigns or other legal representatives, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me/us if this assignment and sale had not been made;

And I/we hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to the said *BASF SE* .

| Paral Aley | Emiliaria 02, 01.2013 |
|--|-----------------------|
| Pascal Hayoz | Date |
| (deceased) | |
| Bernd Lamatsch | Date |
| Achim Lamatsch (Sole Heir) | Date |
| Margherita Fontana | Date |
| Stephan Burkhardt | Date |
| LISA T US Assignment Taya tayan assass | the process of |

PATENT REEL: 028101 FRAME: 0810

| | | Page 2 |
|-----------------|--|--|
| | $\mathcal{L}_{ij} \approx 2\pi i \pi i \pi i \pi_{ij}$ | |
| Laurent Michau | Date | |
| Urs Lehmann | Date | A CONTRACTOR OF THE PARTY OF TH |
| Philippe Bugnon | Date | |

A Company of the Comp

I/We

Pascal Hayoz, Ettingerstrasse 55, 4114 Hofstetten, Switzerland, Citizen of Switzerland; Bernd Lamatsch (deceased), Im Hirshalm 44, 4125 Riehen, Switzerland, Citizen of Germany;

Sole Heir:

Achim Lamatsch, Ernst-Prestel-Strasse 10, 79183 Waldkirch, Germany, Citizen of Germany

Margherita Fontana, Tödistrasse 80, 8800 Thalwil, Switzerland, Citizen of Italy; Stephan Burkhardt, Gansacherweg 42, 4460 Gelterkinden, Switzerland, Citizen of Switzerland; Laurent Michau, 2A rue du Rhin, 68128 Rosenau, France, Citizen of France; Urs Lehmann, Unterer Rheinweg 50, 4057 Basel, Switzerland, Citizen of Switzerland; Philippe Bugnon, Impasse des Rosiers 4, Essert, 1724 Le Mouret, Switzerland, Citizen of Switzerland;

for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, do hereby sell and assign *BASF SE*, 67056 *Ludwigshafen*, *Germany* and its successors, assigns and legal representatives all my/our right, title and interest, in and for the United States of America, in and to the invention entitled:

CHARGED PARTICLES

invented by me/us and described in International application no.

No. PCT/EP2010/058206 filed 11th June 2010

and all United States Letters Patent which may be granted therefor, and all divisions, reissues, continuations and extensions thereof, the said interest being the entire ownership of the said Letters Patent when granted, to be held and enjoyed by the said **BASF SE**, its successors, assigns or other legal representatives, to the full end of the term for which said Letters Patent may be granted, as fully not been made;

And I/we hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to the said BASF SE.

| Pascal Hayoz | | Date |
|---------------------------------------|--|--------------------|
| (deceased) | | |
| Bernd Lamatsch . Lounach | | Date 1008.03. 2012 |
| Achim Lamatsch (Sole Heir) | | Date |
| Margherita Fontana | ************************************** | Date |
| Stephan Burkhardt | Water annual of the Control of the C | Date |
| USA-T_US Assigment Tarrytown - 250214 | 3 李 4 4 45° | Stand: 03/2011 |

A lettich som og a

PATENT REEL: 028101 FRAME: 0812

| | Page 2 |
|-----------------|--------|
| Laurent Michau | Date |
| Urs Lehmann | Date |
| Philippe Bugnon | Date |

USA-T_US Assignent Tarrytown - 250214

I/We

Pascal Hayoz, Ettingerstrasse 55, 4114 Hofstetten, Switzerland, Citizen of Switzerland; Bernd Lamatsch (deceased), Im Hirshalm 44, 4125 Riehen, Switzerland, Citizen of Germany;

Sole Heir:

Achim Lamatsch, Ernst-Prestel-Strasse 10, 79183 Waldkirch, Germany, Citizen of Germany

Margherita Fontana, Tödistrasse 80, 8800 Thalwil, Switzerland, Citizen of Italy; Stephan Burkhardt, Gansacherweg 42, 4460 Gelterkinden, Switzerland, Citizen of Switzerland; Laurent Michau, 2A rue du Rhin, 68128 Rosenau, France, Citizen of France; Urs Lehmann, Unterer Rheinweg 50, 4057 Basel, Switzerland, Citizen of Switzerland; Philippe Bugnon, Impasse des Rosiers 4, Essert, 1724 Le Mouret, Switzerland, Citizen of Switzerland;

for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, do hereby sell and assign *BASF SE*, 67056 *Ludwigshafen*, *Germany* and its successors, assigns and legal representatives all my/our right, title and interest, in and for the United States of America, in and to the invention entitled:

CHARGED PARTICLES

invented by me/us and described in International application no. No. PCT/EP2010/058206 filed 11th June 2010

and all United States Letters Patent which may be granted therefor, and all divisions, reissues, continuations and extensions thereof, the said interest being the entire ownership of the said Letters Patent when granted, to be held and enjoyed by the said *BASF SE*, its successors, assigns or other legal representatives, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me/us if this assignment and sale had not been made;

And I/we hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to the said **BASF SE** .

| | But the state of t | |
|---------------------------------------|--|----------------|
| | 94901 78 (12) (3) (13) | |
| Pascal Hayoz | Date | |
| (deceased) | • | |
| Bernd Lamatsch | Date | |
| Achim Lamatsch (Sole Heir) | Date | |
| Margherita Fontana | Date | |
| Stephan Burkhardt | Date | |
| USA-T_US Assigment Tarrytown - 250214 | $\frac{2(A-A)-1}{(A-A)} = \frac{1}{A} \frac{A}{A} \frac{A}{A}$ | Stand; 03/2011 |

1.1

| Laurent Michau Urs Lehmann | Date 02/01/2012 Date |
|-----------------------------|----------------------|
| Philippe Bugnon | Date |

with the state of the state of

IIWA

Pascal Hayoz, Ettingerstrasse 55, 4114 Hofstetten, Switzerland, Citizen of Switzerland; Bernd Lamatsch (deceased), Im Hirshalm 44, 4125 Riehen, Switzerland, Citizen of Germany;

Sole Heir:

Achim Lamatsch, Ernst-Prestel-Strasse 10, 79183 Waldkirch, Germany, Citizen of Germany

Margherita Fontana, Tödistrasse 80, 8800 Thalwil, Switzerland, Citizen of Italy; Stephan Burkhardt, Gansacherweg 42, 4460 Gelterkinden, Switzerland, Citizen of Switzerland; Laurent Michau, 2A rue du Rhin, 68128 Rosenau, France, Citizen of France; Urs Lehmann, Unterer Rheinweg 50, 4057 Basel, Switzerland, Citizen of Switzerland; Philippe Bugnon, Impasse des Rosiers 4, Essert, 1724 Le Mouret, Switzerland, Citizen of Switzerland;

for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, do hereby sell and assign *BASF SE*, 67056 *Ludwigshafen*, *Germany* and its successors, assigns and legal representatives all my/our right, title and interest, in and for the United States of America, in and to the invention entitled:

CHARGED PARTICLES

USA-T_US Assigment Tarrytown - 250214

invented by me/us and described in international application no.

No. PCT/EP2010/058206 filed 11th June 2010

and all United States Letters Patent which may be granted therefor, and all divisions, reissues, continuations and extensions thereof, the said interest being the entire ownership of the said Letters Patent when granted, to be held and enjoyed by the said BASF SE, its successors, assigns or other legal representatives, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me/us if this assignment and sale had not been made:

And I/we hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to the said BASF SE.

| Pascal Hayoz | Date |
|----------------------------|------|
| (deceased) | |
| Bernd Lamatsch | Date |
| | |
| Achim Lamatsch (Sole Heir) | Date |
| *** | |
| Margherita Fontana | Date |
| Nicolar M. Jak. 20 | |
| Stephan Burkhardt | Date |
| | |

| WALL | Page 2 |
|-----------------|---------------------|
| Laurent Michau | Date 24 - 04 - 2012 |
| Urs Lehmann | Date |
| Philippe Bugnon | Date |

USA-T_US Assigment Tarrytown - 250214

RECORDED: 04/25/2012