



Señores

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO

DIRECCIÓN DE NUEVAS CREACIONES

E. S. D.

Re.: Expediente No. 14-059.449

**Solicitud de Patente de Invención titulada: "DISPOSITIVO PARA MEZCLAR Y
ENFRIAR DOS LÍQUIDOS REACTIVOS Y MÉTODO PARA HACER ÁCIDO
PEROXIMONOSULFÚRICO CON EL MISMO"**

Solicitante: EVONIK DEGUSSA GmbH

Nuestra Ref.: P2014/000044

MEMORIAL DE ALCANCE

CARLOS R. OLARTE, mayor de edad y vecino de Bogotá, D.C., identificado tal como aparece al pie de mi firma, en mi carácter de apoderado de la sociedad en referencia, me permito dar alcance a la solicitud radicada el 19 de marzo de 2014, para aportar el Reporte Internacional Preliminar de Patentabilidad (IPRP, por sus siglas en ingles)

Atentamente,

CARLOS R. OLARTE
CC. No.79.782.747 de Bogotá
T.P. 74.295

Adjunto: Lo enunciado.

Carlos R. Olarte
Juan G. Moura

Alexander Agudelo

Carlos A. Parra

Juan F. Acosta

Andrés Rincón

Mónica Guevara

Andrés Alvarado

Maria C. Calderón

Mauricio Ávila

José J. Dangond

Gina Cáceres

Isabella Herrera

Zaava Ravid

Alejandro Moure

Miguel F. Porras

Catalina Amaya

Laura M. Escobar

Lorena Andrade

Sergio Arboleda

Carolina Celis

Catalina Jiménez

Medellín

Maria C. Múnera

Eddie Manotas

Adrián Santamaría

Barranquilla

Gina De Beheona

PATENT COOPERATION TREATY

PCT/EP2012/068387

PCT

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)

(PCT Rule 44bis.1(c))

Eingang bei
IP & Know-how
Management

10. APR. 2014

From the INTERNATIONAL BUREAU

EVONIK DEGUSSA GMBH
CI-IPM-PAT
Postcode 84/339
Rodenbacher Chaussee 4
63457 Hanau
ALLEMAGNE

Date of mailing (day/month/year)

03 April 2014 (03.04.2014)

Applicant's or agent's file reference

2010P00371WO**IMPORTANT NOTICE**

International application No.

PCT/EP2012/068387

International filing date (day/month/year)

19 September 2012 (19.09.2012)

Priority date (day/month/year)

21 September 2011 (21.09.2011)

Applicant

EVONIK DEGUSSA GMBH

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

**H001058670**

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

Agnès Wittmann-Regis

Facsimile No. +41 22 338 82 70

e-mail: pt06.pct@wipo.int

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 2010P00371WO	FOR FURTHER ACTION		See item 4 below
International application No. PCT/EP2012/068387	International filing date (<i>day/month/year</i>) 19 September 2012 (19.09.2012)	Priority date (<i>day/month/year</i>) 21 September 2011 (21.09.2011)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant EVONIK DEGUSSA GMBH			

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|---|
| ☒ | Box No. I | Basis of the report |
| ☐ | Box No. II | Priority |
| ☐ | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| ☐ | Box No. IV | Lack of unity of invention |
| ☒ | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| ☐ | Box No. VI | Certain documents cited |
| ☐ | Box No. VII | Certain defects in the international application |
| ☐ | Box No. VIII | Certain observations on the international application |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70		Date of issuance of this report 25 March 2014 (25.03.2014) Authorized officer Agnès Wittmann-Regis e-mail: pt06.pct@wipo.int
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PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**
(PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No. PCT/EP2012/068387	International filing date (day/month/year) 19.09.2012	Priority date (day/month/year) 21.09.2011
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International Patent Classification (IPC) or both national classification and IPC
INV. B01F3/08 B01F15/06 B01F5/06 B01F5/04 B01J19/24

Applicant
EVONIK DEGUSSA GMBH

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0
Fax: +49 89 2399 - 4465

Date of completion of
this opinion

see form
PCT/ISA/210

Authorized Officer

Muller, Gérard

Telephone No. +49 89 2399-2331



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2012/068387

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of:
 - ☒ the international application in the language in which it was filed
 - ☐ a translation of the international application into , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1 (b)).
2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))
3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:
 - a. (means)
 - ☐ on paper
 - ☐ in electronic form
 - b. (time)
 - ☐ in the international application as filed
 - ☐ together with the international application in electronic form
 - ☐ subsequently to this Authority for the purposes of search
4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments:

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	<u>1-11</u>
	No: Claims	
Inventive step (IS)	Yes: Claims	<u>1-11</u>
	No: Claims	
Industrial applicability (IA)	Yes: Claims	<u>1-11</u>
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following document:

D1 US 3 644 296 A (BOSCH HENDRIK) 22 February 1972 (1972-02-22)

Document D1 is regarded as being the prior art closest to the subject-matter of claim 1, and discloses a device for mixing two reactive liquids, comprising a first inlet to a head space for introducing a first liquid, and a second inlet to the head space with a multitude of nozzles for introducing a second liquid, said nozzles being located within the head space and oriented to direct the introduced liquid transverse to the axis of the tubes of the tube bundle.

The subject-matter of claim 1 therefore differs from this known device in that it comprises a bundle type heat exchanger, said heat exchanger comprising a multitude of parallel tubes arranged in a common enclosure, and a head space open to one end of all tubes of the tube bundle, and is therefore new (Article 33(2) PCT).

The problem to be solved by the present invention may be regarded as providing efficient means for cooling the mixture, especially for the case that the mixture is accompanied by an exothermic reaction.

The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons: the claimed arrangement is neither shown, nor rendered obvious by any combination of prior art documents, in particular, D1 shows a mixing arrangement close to the claimed one, but addresses a completely different problem, such that the skilled person would not add an heat exchanger downstream of the mixing chamber.

Claims 2-7 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

Claim 8 and claims 9-11 dependent thereon define a method for making peroxomonosulphuric acid using the device defined in claim 1, and as such also meet the requirements of the PCT with respect to novelty and inventive step.