

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

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U.S. Patent No. 7,601,662	U.S. Patent No. 8,404,203
Filed: Feb. 27, 2008	Filed: Jun. 8, 2009
Issued: Oct. 13, 2009	Issued: Mar. 26, 2013
Inventors: Ivor Bull, et al.	Inventors: Ivor Bull, et al.
Title: Copper CHA Zeolite Catalysts	Title: Processes for Reducing Nitrogen Oxides Using Copper CHA Zeolite Catalysts

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**DECLARATION OF OLIVIA SCHMIDT IN IPR2015-01121,  
IPR2015-01123, IPR2015-01124, & IPR2015-01125**

I, Olivia Schmidt, make this declaration in connection with the above referenced *Inter Partes* Reviews of U.S. Patent Nos. 7,601,662 and 8,404,203.

**I. Introduction**

1. I am a Vice President of Global Strategic Marketing for Mobile Emissions Catalysts at BASF Corporation (“BASF”). I have been employed by BASF for 20 years. My current job duties include being responsible for providing global coordination of Mobile Emissions Catalysts efforts to win new customer business, including anticipating and managing customer needs, driving market

share gains, and leading the development and launch of new products. I am also responsible for global innovation and intellectual property strategy.

## II. Market Data Relating to Diesel SCR Catalysts

2. BASF sells a SCR CuCHA catalyst for use in the exhaust treatment system of diesel engines. I understand that Dr. Ahmad Moini has submitted a separate declaration providing details on the specification of the CuCHA catalyst.

3. In the paragraphs below I provide information regarding the size of the total global diesel SCR market in terms of units, as well as the share of the market that corresponds to the CuCHA catalyst described in Dr. Moini's declaration. The data regarding the total market size is compiled from internal databases at BASF and incorporates actual sales by BASF and estimates regarding sales by BASF's licensees<sup>1</sup> and competitors.

4. BASF uses an in-house developed Market Model to estimate the market size for diesel SCR catalysts. The Market Model uses engine production data from two external providers, which are updated quarterly. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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<sup>1</sup> Johnson Matthey Inc. is a licensee of the 662 Patent. *See* Exhibit-2028.

5. BASF also maintains an in-house database called [REDACTED] which is a global internal database used to capture market development by customer and competitor, based on information that is collected from our interactions with OEMs (original equipment manufacturers). This model is updated and maintained by BASF's regional market teams.

6. Based on BASF's internal data, the global diesel SCR market is growing and has nearly doubled since 2011. The table below shows the estimated total size of the global diesel SCR market by volume of SCR catalyst units sold from 2011 to 2015.

<b>Total Global SCR Market by Units Sold (in million)</b>	
2011	[REDACTED]
2012	[REDACTED]
2013	[REDACTED]
2014	[REDACTED]
2015	[REDACTED]

7. Based on the BASF's internal data, which includes sales of BASF CuCHA catalysts, estimates regarding the sales by BASF licensees, and the above estimate for the total market size, it is estimated that the CuCHA catalyst has satisfied at least [REDACTED] of the global market in each of the last five years (2011-2015).

8. The data referenced above are numbers that BASF maintains in the ordinary course of business, regularly relies upon, and considers highly

confidential. This market share and sales data is available to our marketing and sales managers.

**III. Availability for Cross-Examination**


9. I realize that this signed declaration will be filed as evidence in a contested case before the Patent Trial and Appeal Board of the United States Patent and Trademark Office. I also realize that I may be subject to cross examination in the case within the United States. If such cross examination is required, I will appear for cross examination within the United States during the time allotted.

**IV. Jurat**

10. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

11. I declare under penalty of perjury that the foregoing is true and correct.

Executed on February 12, 2016

  
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Olivia Schmidt