

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

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**ARKEMA FRANCE,**  
*Petitioner*

**v.**

**HONEYWELL INTERNATIONAL INC.**  
*Patent Owner*

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**Case IPR2015-00916**  
**U.S. Patent No. 8,710,282**

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**DECLARATION OF DANIEL C. MERKEL**

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Pursuant to 28 U.S.C. § 1746, I, Daniel C. Merkel, state of my personal knowledge as follows:

1. I have been asked to provide details with regard to certain activities that I participated in during 2008 and 2009.

2. I am a principal engineer at the Honeywell International Inc.'s ("Honeywell") Buffalo Research Laboratory and have been with Honeywell for the last 25 years. During the 2008 and 2009 period at issue, I reported directly to Hsueh Sung Tung, Ph.D., ("Dr. Tung"). In this role, I typically assumed the role of Department Manager for the process development group in Dr. Tung's absence and was empowered to sign on his behalf. To date, I typically still perform this role when Dr. Tung is unavailable.

3. As the Department Manager and Skill Center Leader, it is generally Dr. Tung's responsibility to review and sign project permit or project permit change forms. However, when Dr. Tung is unavailable, I am authorized to approve project permit or project permit change forms. Accordingly, I signed the July 10, 2008 Project Permit Change Form identified as Exhibit 2008. I confirm that the July 10, 2008 Project Permit Change Form is a true and accurate copy of the project change form which I received in the ordinary course of business at or near

July 10, 2008. I certify that I signed and dated the Project Permit Change Form on July 10, 2008.

4. Subsequent to the approval of the project permit and as noted on the invention disclosure form, I witnessed the performance of the caustic dehydrofluorination experiments utilizing KOH experiments by lab technicians Steven Phillips and Angela Mazurkiewicz (now Angela Goodie) on July 29-30, 2008 (“July 29 Instructions”). The July 29 Instructions that guided the experiments that I witnessed I understand have been submitted here as Exhibit 2012.

5. As a member of the Buffalo Research Laboratory team and a prolific inventor myself, I understand that it is Honeywell’s policy that the inventors maintain an invention notebook as part of their work for Honeywell and that it is Honeywell’s policy to retain and maintain inventor notebooks as part of a regularly conducted business activity. These invention notebooks provide a space for confirmation by a witness that the particular disclosure was read and understood. In August 2009, Dr. Selma Bektesevic asked me to view and sign her laboratory notebook that contained her inventions. With reference to Exhibit 2039, I confirm that on August 21, 2009, I reviewed Dr. Bektesevic’s notebook section entitled “Integrated Continuous Process for Dehydrofluorination of 236ea and 245eb” that

included an invention disclosure written by her in the ordinary course of her work for Honeywell which related to the experiments that I witnessed on July 29-30, 2008. I certify that I signed and dated each page of the notebook section entitled “Integrated Continuous Process for Dehydrofluorination of 236ea and 245eb” on August 21, 2009. The words, drawing, images, and descriptions of the drawings shown on Exhibit 2039 were present on the pages when I signed and dated the pages of the notebook. I confirm Exhibit 2039 is a true and accurate copy of the pages in the book and includes my signature with a date of August 21, 2009 and that this particular record was kept and maintained at Honeywell as part of its regularly conducted business activity.

Declaration of Daniel C. Merkel  
IPR2015-00916

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct and that all statements made herein of my own knowledge are true and that all opinions expressed herein are my own; and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Daniel C. Merkel  
Daniel C. Merkel

January 21, 2016  
Date