

**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 ANGELA GOODIE**

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Declaration of Angela Goodie  
IPR2015-00916

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

1. I make this declaration to provide details with regard to certain experiments that I performed in 2008 related to caustic dehydrofluorination experiments utilizing KOH.

2. Since that time, my name has changed from Angela Mazurkiewicz to Angela Goodie.

3. As a lab technician at Honeywell International Inc.'s ("Honeywell") Buffalo Research Laboratory ("BRL"), I am charged with performing experiments in accordance with instructions provided by the researchers. It is a required policy that lab technicians, not researchers, perform the experiments in the lab. Thus, it is regular practice for the researchers to prepare and provide lab technicians with instructions in order for the experiments to be performed.

4. As is customary, Dr. Selma Bektesevic prepared and provided me with detailed instructions on or near July 16, 2008, in the regular course of business, so that I could perform caustic dehydrofluorination experiments utilizing KOH ("July 16 Instructions"). As instructed, I performed experiments in line with the July 16, 2008 Instructions using the lab setup described in the Project Permit Change Form (EX2009). I recall that pursuant to the July 16 Instructions, I filled

the reactor with 25% KOH and organic, heated to 50°C for one hour, then refluxed for one hour. As part of the experiment, I regularly analyzed vapor samples once in one hour and liquid samples once in four hours. We also placed the discharged spent KOH in two scrubber PCCs prefilled with MeCl<sub>2</sub> in order to separate and recover spent KOH from everything else withdrawn. A true and accurate copy of the original July 16 Instructions I received and utilized to perform the experiment are submitted here as Exhibit 2011.

5. Dr. Bektsevic subsequently prepared and provided instructions for myself and my colleague Steven Phillips on or near July 29, 2008, in the regular course of business, instructing us to perform additional caustic dehydrofluorination experiments utilizing KOH on July 29-30, 2008 ("July 29 Instructions"). As instructed, we performed experiments in line with the July 29 Instructions. I recall that pursuant to the July 29 Instructions, we filled the reactor with 25% KOH and organic, heated to 50°C for one hour, then refluxed for one hour. We thereafter started the pumps in order to start the flow of organic and KOH into the reactor. We then stopped the stirrer after approximately 30 minutes (with organic and KOH still flowing in), waited for approximately 10 minutes, and then discharged spent KOH. We then closed the KOH outlet and restarted the stirrer. We then repeated the above but with varying stirrer shut off times. As part of the experiment, we

regularly analyzed vapor samples once in two hours. We also placed the discharged spent KOH in scrubber product collection cylinders (“SPCCs” or “scrubber PCCs”) prefilled with  $\text{MeCl}_2$  in order to separate and recover spent KOH from everything else withdrawn. A true and accurate copy of the original July 29 Instructions I received and utilized to perform the experiment are submitted here as Exhibit 2012.

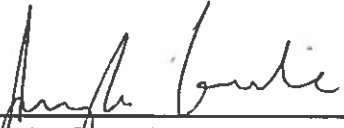
6. Dr. Bektasevic subsequently prepared and provided instructions to me on or near September 15, 2008, in the regular course of business, to perform additional caustic dehydrofluorination experiments utilizing KOH (“September 15 Instructions”). As instructed, we performed experiments in line with the September 15 Instructions. I recall that pursuant to the September 15 Instructions, we filled the reactor with 25% KOH and organic, heated to 60-65°C for one hour, then refluxed for one hour. We thereafter started the pumps in order to start the flow of organic and KOH into the reactor. We then stopped the stirrer after approximately 50 minutes (with organic and KOH still flowing in), waited for approximately 10 minutes, and then discharged spent KOH using a 5-inch dip tube. We then closed the KOH outlet and restarted the stirrer. We then repeated the above. As part of the experiment, we regularly analyzed vapor samples once in one hour. We also placed the discharged spent KOH in scrubber PCCs prefilled

Declaration of Angela Goodie  
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with  $\text{MeCl}_2$  in order to separate and recover spent KOH from everything else withdrawn. We thereafter titrated the SPCC utilizing HCl. A true and accurate copy of the original September 15 Instructions I received and utilized to perform the experiment are submitted here as Exhibit 2015.

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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.

  
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Angela Goodie

1.22.16  
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Date