UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CURIUM US LLC,

Petitioner,

v.

UNIVERSITÄT HEIDELBERG AND THE EUROPEAN ATOMIC ENERGY COMMUNITY (EURATOM), REPRESENTED BY THE EUROPEAN COMMISSION,

Patent Owners

Case No. IPR2025-01582

Patent No. 10,980,901 B2

DECLARATION OF PROF. DR. KLAUS KOPKA

Patent Owner Exhibit 2077
IPR2025-01582

1. I, Prof. Dr. Klaus Kopka, submit this declaration in support of the above-referenced proceeding.
2. I have personal knowledge of the matters set forth in this declaration unless otherwise indicated.
3. I am a full-time researcher at Helmholtz-Zentrum Dresden-Rossendorf and Technische Universität Dresden.
4. The statements in this declaration are true and correct to the best of my knowledge and belief and are based on my own personal education, training, and experience unless otherwise indicated.

I. PERSONAL BACKGROUND

5. I am a radiopharmaceutical chemist and translational scientist specializing in theranostic radiopharmaceutical drug development. Since 2019, I have served as Institute Director of the Institute of Radiopharmaceutical Cancer Research at Helmholtz-Zentrum Dresden-Rossendorf (HZDR) in Dresden, Germany, and as Full Professor (W3) of Bioinorganic and Radiopharmaceutical Chemistry at Technische Universität Dresden (TUD). Since 2019, I have also been a member of the Directorate of the National Center for Tumor Diseases (NCT), Partner Site Dresden.
6. Prior to my current appointments, from 2013 to 2019 I was Head of the Division of Radiopharmaceutical Chemistry at the German Cancer Research

Center (DKFZ) in Heidelberg and Full Professor of Radiopharmaceutical Chemistry at the University of Heidelberg. In 2012, I was appointed Adjunct Professor of Radiopharmaceutical Chemistry at the University of Münster. From 1997 to 2013, I led the Radiochemistry Working Group in the Department of Nuclear Medicine at the University Hospital Münster.

7. I received a Doctorate in the Natural Sciences from the University of Münster in 1996. My research career has centered on the design, synthesis, and clinical translation of small-molecule radioligands for precision oncology, with a particular emphasis on prostate-specific membrane antigen (PSMA) theranostics.

8. I am a co-inventor on numerous patent publications relating to radiopharmaceutical chemistry, including PSMA-targeted inhibitors. These include U.S. Patent Nos. 10,398,791 (the "'791 Patent") describing ^{177}Lu-PSMA-167, the drug substance in Pluvicto.

9. I have co-authored more than 280 peer-reviewed publications.

THE '901 PATENT AND THE 2016 PAPER

10. I am a co-author on a 2016 Journal of Nuclear Medicine publication titled "^{225}Ac-PSMA-617 for PSMA-Targeted α-Radiation Therapy of Metastatic Castration-Resistant Prostate Cancer." Clemens Kratochwil et al., *^{225}Ac-PSMA-617 for PSMA-Targeted α-Radiation Therapy of Metastatic Castration-*

Resistant Prostate Cancer, 57 J. Nuclear Medicine 1941 (2016). I understand that this publication is being referred to as "Kratochwil 2016." This paper describes the impressive clinical results of treatment of prostate cancer patients with ^{225}Ac-PSMA-617.

11. Although I was included as a co-author on the Kratochwil 2016 paper, I do not believe that I qualify as an inventor on the '901 Patent. My lab and I developed the PSMA-617 carrier molecule. We tested it using the ^{177}Lu radionuclide and worked with Dr. Kratochwil on clinical testing of the ^{177}Lu-PSMA-617. However, Drs. Kratochwil and Morgenstern initiated and led a separate and distinct project to prepare and test the ^{225}Ac-PSMA-617 molecule that I was not involved in. I did not help to combine the ^{225}Ac with the PSMA-617 and played no role in investigating the dosage or clinical testing of ^{225}Ac-PSMA-617.

12. In 2013, when I joined the German Cancer Research Center (DKFZ) in Heidelberg, I took over the project of developing the PSMA-targeting molecule with a chelator (HBED-CC, now called PSMA-11) which had begun shortly before my arrival. In 2013, the PSMA-617 molecule was created in my lab by my Ph.D. student, Martina Benešová. After our preliminary work in characterizing ^{177}Lu-PSMA-617, Drs. Kratochwil and Haberkorn performed clinical testing of the molecule and conducted experiments on the activity and

dosing of ^{177}Lu-PSMA-617 for treatment. We filed a patent application on this work related to PSMA-617, that ultimately resulted in the ’791 patent.

13. My work with the PSMA-617 molecule focused on ^{177}Lu because ^{177}Lu and its properties as a particle emitter had been clinically evaluated and, as an alpha emitter, ^{177}Lu did not present issues with recoil.

14. Dr. Morgenstern was a specialist in the field of ^{225}Ac and had developed several techniques for working with ^{225}Ac. I had not considered using ^{225}Ac with PSMA-617.

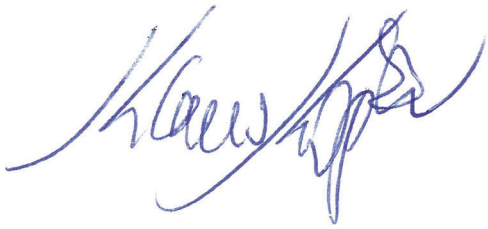
15. The results from using ^{225}Ac-PSMA-617 in prostate cancer were very surprising, especially because the patients in the study had very late-stage prostate cancer and had failed to respond to other treatments. The post-treatment survival for this population of late-stage patients was also surprising, as these patients had a downregulated immune system.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed this 02_ day of December___, 2025.

Kopka, Klaus

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Datum: 2025.12.02 10:23:43 +01'00'



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