

**UNITED STATES PATENT AND TRADEMARK OFFICE**

---

**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

---

**HANWHA SOLUTIONS CORPORATION,**

**Petitioner,**

**v.**

**MAXEON SOLAR PTE. LTD.,**

**Patent Owner.**

---

**Case No. IPR2024-01199**

**U.S. Patent No. 8,878,053**

---

**DECLARATION OF GILBERT T. SMOLENSKI REGARDING  
EXHIBITS 1072, 1074, 1078-1080, 1085-1086**

HANWHA v. MAXEON  
IPR2024-01199  
HANWHA 1089

I, Gilbert T. Smolenski, declare as follows:

1. I am an attorney at the law firm of Wilmer Cutler Pickering Hale and Dorr LLP in the Washington, DC office, which represents the Petitioner Hanwha Solutions Corporation in this proceeding.

2. I was involved in the preparation of the Petitioner's Reply, and this declaration is based on my personal knowledge from being involved in the preparation of the Petitioner's Reply.

3. **Exhibit 1072** is a copy of a SANDIA Report SAND2000-1046, titled "Fundamental Understanding and Development of Lost-Cost, High-Efficiency Silicon Solar Cells, Annual Progress Report: Sept. 1998-Aug. 1999," and authored by A. Rohatgi, S. Narasimha, J. Moscher, A. Ebong, S. Kamra, T. Krygowski, P. Doshi, A. Ristow, and V. Yelundur. This report was prepared and published by Sandia National Laboratories and is dated May 2000. Further, this report was marked, without objections, as **Exhibit 1072** at the deposition of Dr. Ruby taken in this proceeding. *See* Ex.1075-Ruby-Tr., 109:10-16. Exhibit 1072 is a true and accurate copy of this report that was obtained while preparing the Petitioner's Reply.

4. **Exhibit 1074** is a copy of an article titled, "Simplified processing for 23%-efficient silicon concentrator solar cells," and authored by Douglas Ruby, P. A. Basore, M. E. Buck, J. M. Gee, W. K. Schubert, and H. L. Tardy. This article was published in the *Conference Record of the Twenty Third IEEE Photovoltaic*

*Specialists Conference* and has a copyright date of 1993. Further, this article was marked, without objections, **Exhibit 1074** at the deposition of Dr. Ruby taken in this proceeding. *See* Ex.1075-Ruby-Tr., 156:9-18. Exhibit 1074 is a true and accurate copy of this report that was obtained while preparing the Petitioner's Reply.

5. **Exhibit 1078** is a copy of an article titled "MIS Solar Cells: A Review," and authored by David L. Pulfrey. This article was published in *IEEE Transactions on Electronic Devices* and has a copyright date of 1978. **Exhibit 1078** is a true and accurate copy of this article that was obtained while preparing Petitioner's Reply.

6. **Exhibit 1079** is a copy of an article titled "Physical Properties of RT-LPCVD and LPCVD Polysilicon Thin Films: Application to Emitter Solar Cell," and authored by M. Lemiti, B. Semmache, Q. N. Le, D. Barbier, and A. Laugier. This article was published in the *Proceedings of 1994 IEEE 1st World Conference on Photovoltaic Energy Conversion - WCPEC (A Joint Conference of PVSC, PVSEC and PSEC)* and has a copyright date of 1994. **Exhibit 1079** is a true and accurate copy of this article that was obtained while preparing Petitioner's Reply.

7. **Exhibit 1080** is a copy of an article titled "Record efficiencies above 21% for MIS-contacted diffused junction silicon solar cells," and authored by Axel Metz and Rudolf Hezel. This article was published in the *Conference Record of the Twenty Sixth IEEE Photovoltaic Specialists Conference* and has a copyright date of

1997. **Exhibit 1080** is a true and accurate copy of this article that was obtained while preparing Petitioner's Reply.

8. **Exhibit 1085** is a copy of a SAND Report, SAND 2001-0833, titled "History of the Crystalline Silicon Photovoltaic Cell Research Program at Sandia National Laboratories," and authored by Douglas Ruby and James Gee. This report was prepared and published by Sandia National Laboratories and is dated April 2001. **Exhibit 1085** is a true and accurate copy of this report that was obtained while preparing Petitioner's Reply.

9. **Exhibit 1086** is a copy of an article, titled "The Effects Of Different Diffusion Sources On Silicon Solar Cell Recombination Properties," and authored by Douglas S. Ruby and John D. McBrayer. This article was published by Sandia National Laboratories and is dated 1990. **Exhibit 1086** is a true and accurate copy of this article that was obtained while preparing Petitioner's Reply.

10. In signing this declaration, I recognize that the 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 recognize that I may be subject to cross-examination in the case and that cross-examination will take place within the United States. If cross-examination is required of me, I will appear for cross-examination within the United States during the time allotted for cross-examination.

11. 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.

Dated: September 5, 2025

/s/Gilbert T. Smolenski

Gilbert T. Smolenski  
Registration No: 78,549  
WILMER CUTLER PICKERING  
HALE AND DORR LLP  
2100 Pennsylvania Avenue NW  
Washington, DC 20037  
Tel: 202-663-6295  
Email: gilbert.smolenski@wilmerhale.com