

STATEMENT OF CONSIDERATIONS

REQUEST BY INTEL FOR AN ADVANCE WAIVER OF RIGHTS IN INTELLECTUAL PROPERTY MADE IN THE COURSE OF THE CIRGEN CIRCUIT EDIT TOOL BAILMENT AGREEMENT AND INTELLECTUAL PROPERTY AGREEMENT CONTRACT NO. 14219 WITH NATIONAL TECHNOLOGY & ENGINEERING SOLUTIONS OF SANDIA, LLC (NTESS)

WAIVER DOCKET W(A)2024-002

The Petitioner, Intel desires ownership of worldwide patent rights in any Subject Inventions made by NTESS and rights to any Technical Data developed by NTESS in General Project Technology (“Project IPR”) as defined in the IP Agreement between the parties, and license rights to Feedback given by NTESS in the course of, or under, the above-identified Bailment and Intellectual Property (IP) Agreement. Feedback, represented as Technical Data, means written information which NTESS shares with Intel related to NTESS requirements, inputs, comments, responses, opinions, feedback, performance and efficacy data, and errata, whether oral or written, concerning the Cirgen circuit edit tool and NTESS’s technical system requirements for Intel to include in the tool. Intel also desires to retain all existing Intellectual Property Rights, including Copyrights, to the Cirgen circuit edit tool , processes and workflows to use the tool.

The ability of the U.S. Government (USG) to maintain a strategic advantage over its adversaries critically depends on semiconductor leadership. As the USG pursues integrating the most advanced semiconductors into national security systems through design and production of advanced chips, it is equally important that the USG simultaneously develop tools and techniques to perform in-house failure analysis of those chips. To this end, the USG is interested in developing and understanding Focused Ion Beam (FIB) circuit edit on advanced, state-of-the-art (SOTA) microelectronics such as the Intel 18A process node. Given higher complexity of SOTA devices, it is expected that an advanced FIB circuit edit tool, such as the Cirgen tool, will be required to perform circuit edits on modern node microelectronics for failure analysis purposes. The USG is interested in understanding the capabilities and limitations of the new Cirgen circuit edit tool. Circuit edit methods are also of great interest to Intel given their need to perform failure analysis and understanding its capability and limitations. Intel is loaning NTESS the use of a Cirgen 1.5 platform, valued at \$12M, until March 31, 2027. NTESS will develop techniques and processes while using the Cirgen tool to evaluate the efficacy of using this tool for advanced circuit edit on SOTA microelectronics. NTESS’s work on the Cirgen tool is in support of a project for the USG. Technical Data representing techniques and processes, as well as information related to the tool’s capabilities and limitations, will be shared with Intel to make sure future versions of the Cirgen circuit edit tool support the NTESS developed techniques and processes. Results (e.g., tool performance evaluation results and application work performed on the tool) from the NTESS work with the Cirgen tool will be reported to the USG sponsor.

A Bailment Agreement has been executed between NTESS and Intel covering the loan of the Cirgen tool. In addition to the tool, Intel will be providing to NTESS information including proprietary processes and techniques which Intel has developed to use the Cirgen tool. Intel is sharing this information with NTESS to help NTESS more effectively and efficiently utilize the Cirgen tool. It is

expected that NTESS and Intel will regularly share information, some intellectual property (Intel IP), processes, and techniques during the loan. Intel is interested in obtaining all necessary rights to improvements which NTESS makes to this Intel IP and the necessary rights to NTESS-developed processes and techniques to improve its own capabilities to make improvements in the Cirgen tool and continue to deliver to its USG sponsor. Intel and NTESS have an IP agreement to address ownership and rights to both Intel and NTESS background IP, derivative works, and modifications of that background IP as well as new IP that arises from working with the Cirgen tool. The IP agreement endeavors to make sure Intel retains ownership of NTESS-developed derivative works and modifications of its background IP, and it preserves USG rights in that developed IP by NTESS.



As a condition of this waiver, to the extent that Subject Inventions and Technical Data are manufactured by or used in the manufacture of products by Intel, Intel agrees to undertake commercially reasonable efforts to have products manufactured substantially in the US, if Intel determines in its discretion that there is a US-based supplier that meets all of Intel's technical, business, and legal requirements for supply of such products under terms and conditions that are customary and reasonable for the industry.

Intel also agrees not to manufacture the products incorporating the Subject Inventions or Technical Data in Countries of Risk (i.e., the People's Republic of China (PRC), Russia, North Korea, and Iran). Intel agrees to make this restriction for manufacturing of products incorporating the Subject Inventions binding upon any licensee, assignee, contractor, and any other entity receiving rights to the Subject Inventions including any manufacturer making products incorporating the Subject Inventions and Technical Data for Intel.

Conclusion

Considering Intel's developed and demonstrated capabilities in SOTA microelectronics and FIB circuit editing, related fields, and its existing efforts to secure intellectual property that is associated with these capabilities, awarding this waiver to ensure Intel obtains ownership of NTESS-developed IP related to the Cirgen tool will provide Intel with the necessary incentive to invest its resources to maintain its position as a world leader in semiconductor production.

Therefore, upon evaluation of the waiver petition and in view of the objectives and considerations set forth in 10 CFR §784 and 48 CFR § 52.227-14, all of which have been considered, I recommend that the requested waiver be granted.

 
EKSTROM
Date: 2024.05.15 22:21:52 -0600

Carmen Ekstrom
Patent Attorney
DOE/NNSA Albuquerque

Date: _____

Based on the foregoing Statement of Considerations and the representations of the attached Waiver Petition, it is determined that the interests of the United States and the public will best be served by a waiver of patent rights of the scope described above and therefore, the waiver is granted.

Concurrence:



Rick Balthaser
LDRD Program Manager,
Signed at the request of and
For the Funding Sponsor

Date: _____



Approval:

Brian Lally
Assistant General Counsel
For Technology Transfer and
Intellectual Property (GC-62)

Date: _____