3510-DS-P

DEPARTMENT OF COMMERCE

International Trade Administration

***Harvard University* et al.; Application(s) for Duty-Free Entry of Scientific Instruments**

Pursuant to Section 6(c) of the Educational, Scientific and Cultural Materials Importation Act of 1966 (Pub. L. 89-651, as amended by Pub. L. 106-36; 80 Stat. 897; 15 CFR part 301), we invite comments on the question of whether instruments of equivalent scientific value, for the purposes for which the instruments shown below are intended to be used, are being manufactured in the United States.

Comments must comply with 15 CFR 301.5(a)(3) and (4) of the regulations and be postmarked on or before (Insert date 20 days after publication in the FEDERAL REGISTER). Address written comments to Statutory Import Programs Staff, Room 41006, U.S. Department of Commerce, Washington, D.C. 20230. Please also e-mail a copy of those comments to Dianne.Hanshaw@trade.gov.

Docket Number: 24-013. Applicant: Harvard University, 17 Oxford Street, Jefferson 158, Cambridge, MA 02138. Instrument: Narrow linewidth single frequency fiber laser. Manufacturer: Shanghai Precilaser Technology, Co., Ltd., China. Intended Use: The instrument is intended to be used for the high power (15 W), single frequency laser system at 828. 5 nm will be used in a quantum physics experiment at Harvard for optical tweezer trapping of rubidium-87 atoms. The available laser power will allow many more of these atoms (thousands) to be controlled than previously demonstrated (hundreds). This will allow the study of larger quantum systems with properties and fidelities far exceeding smaller systems.

Justification for Duty-Free Entry: According to the applicant, there are no instruments of the same general category manufactured in the United States. Application accepted by Commissioner of Customs: May 8, 2024.

Docket Number: 24-014. Applicant: Drexel University, Rm-MS 3701, Market Street, RM 470, Central Receiving, 34th & Ludlow Streets, Philadelphia, PA 19104.

Instrument: Battery fabrication equipment. Manufacturer: Xiamen TOB New Energy. Intended Use: The instrument is intended to be used to understand how battery electrodes are made, how to improve their processing, and how to make higher performance rechargeable batteries. The battery materials include oxides, and carbons and the phenomena is battery electrode microstructure and performance. Justification for Duty-Free Entry: According to the applicant, there are no instruments of the same general category manufactured in the United States. Application accepted by Commissioner of Customs: April 9, 2024.

Docket Number: 24 -015. Applicant: Harvard University, 17 Oxford Street, Jefferson 158, Cambridge, MA 02138. Instrument: Narrow Linewidth Laser. Manufacturer: Shanghai Precilaser Technology, Co., Ltd., China. Intended Use: The high power (15 W), narrow-linewidth / single frequency laser system at 852 nm will be used in a quantum physics experiment at Harvard for optical tweezer trapping of rubidium-87 atoms. Narrow-linewidth operation of the laser is critical to the method of optical tweezer generation we use to trap atoms, and we need as much power as possible to perform experiments on the largest possible quantum systems. The wavelength of 852 nm is important because it is sufficiently far detuned from the atomic transition to provide long qubit coherence time. Justification for Duty-Free Entry: According to the applicant, there are no instruments of the same general category manufactured in the United States. Application accepted by Commissioner of Customs: April 29, 2024.

Docket Number: 24-016. Applicant: Cornell University, 377 Pine Tree Rd, Ithaca, NY 14850. Instrument: Closed-cycle cryostat sample manipulator for ultra-low temperature angle-resolved photoemission spectroscopy & electron energy loss spectroscopy. Manufacturer:

Fermion Instrument, China. Intended Use: The instrument is intended to be used to conduct two different types of experiments: angle-resolved photoemission spectroscopy (ARPES) and electron energy-loss spectroscopy (EELS). ARPES is a technique which allows us to measure directly the momentum-resolved single-particle electronic structure of materials. EELS is a technique which allows us to measure the energy-resolved collective excitations in materials (such as lattice vibrations, plasmons, etc.). We currently have an electron detector that is, in principle, compatible with both techniques. Justification for Duty-Free Entry: According to the applicant, there are no instruments of the same general category manufactured in the United States. Application accepted by Commissioner of Customs: April 2, 2024.

Dated: June 20, 2024.

Gregory W. Campbell,
Director, Subsidies and Economic Analysis,
Enforcement and Compliance.

[FR Doc. 2024-13919 Filed: 6/24/2024 8:45 am; Publication Date: 6/25/2024]