

1062. 3. CAMERAS None
1062. 4. OPTICS
Equipment for measuring absolute reflectance to an accuracy of $\pm 0.1\%$ of the reflectance value;
1062. 5. LASERS
Specially designed or modified equipment, including tools, dies, fixtures or gauges, as follows, and other specially designed components and accessories therefor:
1062. 5. a. For the manufacture or inspection of:
1. Free electron "laser" magnet wigglers;
 2. Free electron "laser" photo injectors;
- b. For the adjustment, to required tolerances, of the longitudinal magnetic field of free electron "lasers";
1062. 6. MAGNETOMETERS None
1062. 7. GRAVIMETERS
Equipment to produce, align and calibrate land-based gravity meters with a static accuracy of better than 0.1 milligal;
1062. 8. RADAR
Pulse radar cross-section measurement systems having transmit pulse widths of 100 ns or less and specially designed components therefor.

1063. MATERIALS

1063. 1. ACOUSTICS None
1063. 2. OPTICAL SENSORS
- a. Elemental tellurium (Te) of purity levels equal to or more than 99.9995%;
 - b. Single crystals of cadmium telluride (CdTe) or mercury cadmium telluride (CdHgTe) of any purity level, including epitaxial wafers thereof;
Technical Note:
Purity verified in accordance with ASTM F574-83 standard or equivalents.
 - c. "Optical fibre preforms" specially designed for the manufacture of high birefringence fibres embargoed by 1061.2.d.3;
1063. 3. CAMERAS None
1063. 4. OPTICS
- a. Zinc selenide (ZnSe) and zinc sulphide (ZnS) "substrate blanks" produced by the chemical vapour deposition process:
 1. Larger than 100 cm³ in volume; or
 2. Larger than 80 mm in diameter with a thickness equal to or more than 20 mm;
 - b. Boules of the following electro-optic materials:
 1. Potassium titanyl arsenate (KTA);
 2. Silver gallium selenide (AgGaSe₂);
 3. Thallium arsenic selenide (Tl₃AsSe₃, also known as TAS);
 - c. Non-linear optical materials having:
 1. Third order susceptibility (χ_3) equal to or less than 1 W/m²; and
 2. A response time of less than 1 ms;
 - d. "Substrate blanks" of silicon carbide or beryllium beryllium (Be/Be) deposited materials exceeding 300 mm in diameter or major axis length;
 - e. Low optical absorption materials, as follows:
 1. Bulk fluoride compounds containing ingredients with a purity of 99.999% or better;
NOTE:
1063.4.e.1. embargoes fluorides of zirconium or aluminium and variants.
 2. Bulk fluoride glass made from compounds embargoed by 1063.4.e.1.;
 - f. Glass, including fused silica, phosphate glass, fluorophosphate glass, zirconium fluoride (ZrF₄) and hafnium fluoride (HfF₄) with:
 1. A hydroxyl ion (OH⁻) concentration of less than 5 ppm;
 2. Integrated metallic purity levels of less than 1 ppm; and
 3. High homogeneity (index of refraction variance) less than 5×10^{-6} ;
 - g. Synthetically produced diamond material with an absorption of less than 10⁻⁵ cm⁻¹ for wavelengths exceeding 200 nm but not exceeding 14,000 nm;
 - h. "Optical fibre preforms" made from bulk fluoride compounds containing ingredients with a purity of

99.999% or better, specially designed for the manufacture of "fluoride fibres" embargoed by 1061.4.f.;

1063. 5. LASERS
Crystalline "laser" host material in unfinished form, as follows:
- a. Titanium doped sapphire;
 - b. Alexandrite.
1063. 6. MAGNETOMETERS None
1063. 7. GRAVIMETERS None
1063. 8. RADAR None

1064. SOFTWARE

1064. 1. "Software" specially designed for the "development" or "production" of equipment embargoed by 1061.4, 1061.5., 1061.8 or 1062.8.
2. "Software" specially designed for the "use" of equipment embargoed by 1061.2.b., 1061.8 or 1062.8.;
3. Other "software", as follows:
- a. ACOUSTICS
 1. "Software" specially designed for acoustic beam forming for the "real time processing" of acoustic data for passive reception using towed hydrophone arrays;
 2. "Source code" for the "real time processing" of acoustic data for passive reception using towed hydrophone arrays
 - b. OPTICAL SENSORS None
 - c. CAMERAS None
 - d. OPTICS None
 - e. LASERS None
 - f. MAGNETOMETERS
 1. "Software" specially designed for magnetic compensation systems for magnetic sensors designed to operate on mobile platforms;
 2. "Software" specially designed for magnetic anomaly detection on mobile platforms;
 - g. GRAVIMETERS
"Software" specially designed to correct motional influences of gravity meters or gravity gradiometers;
 - h. RADAR
 1. Air Traffic Control "software" application "programmes" hosted on general purpose computers located at Air Traffic Control centres and capable of any of the following:
 - a. Processing and displaying more than 150 simultaneous "system tracks";
 - b. Accepting radar target data from more than four primary radars; or
 - c. Automatically handing over primary radar target data (if not correlated with secondary surveillance radar (SSR) data) from the host ATC centre to another ATC centre;
 2. "Software" for the design or "production" of radomes which:
 - a. Are specially designed to protect the "electronically steerable phased array antennae" embargoed by 1061.8.e.; and
 - b. Limit the average side-lobe level increase by less than 13 dB for frequencies equal to or higher than 2 GHz.

1065. TECHNOLOGY

1065. 1. Technology according to the General Technology Note for the "development" of equipment, materials or "software" embargoed by 1061., 1062., 1063. or 1064.;
2. Technology according to the General Technology Note for the "production" of equipment or materials embargoed by 1061., 1062. or 1063.
3. Other technology:
- a. ACOUSTICS None
 - b. OPTICAL SENSORS None
 - c. CAMERAS None
 - d. OPTICS
 1. Optical surface coating and treatment technology required to achieve uniformity of 99.5% or better for optical coatings 500 nm or more in diameter or major axis length and with a total loss (absorption and scatter) of less than 5×10^{-3} ;
 2. Optical fabrication technologies, as follows: