119TH CONGRESS
1ST SESSION

S. ______

To amend the Internal Revenue Code of 1986 to expand the advanced manufacturing investment credit to include materials integral to semiconductor manufacturing.

IN THE SENATE OF THE UNITED STATES

Mrs. BLACKBURN (for herself, Mr. BENNET, Mr. TILLIS, and Mr. COONS) introduced the following bill; which was read twice and referred to the Committee on ____________________

A BILL

To amend the Internal Revenue Code of 1986 to expand the advanced manufacturing investment credit to include materials integral to semiconductor manufacturing.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ‘‘Strengthening Essential Manufacturing and Industrial Investment Act’’ or the ‘‘SEMI Investment Act’’.

SEC. 2. EXPANSION OF ADVANCED MANUFACTURING INVESTMENT CREDIT.

(a) IN GENERAL.—Paragraph (3) of section 48D(b) of the Internal Revenue Code of 1986 is amended to read as follows:

"(3) ADVANCED MANUFACTURING FACILITY.—

"(A) IN GENERAL.—For purposes of this section, the term 'advanced manufacturing facility' means a facility for which the primary purpose is the manufacturing of—

"(i) semiconductors,

"(ii) semiconductor manufacturing equipment, or

"(iii) semiconductor materials.

"(B) SEMICONDUCTOR MATERIALS.—

"(i) IN GENERAL.—For purposes of this paragraph, the term 'semiconductor materials' means—

"(I) any direct production material, or

"(II) any indirect production material,

which is used in semiconductor manufacturing (as defined in section 231.116 of title 15, Code of Federal Regulations).

"(ii) DIRECT PRODUCTION MATERIAL.—For purposes of this subparagraph, the term 'direct production material' means a material which is—

"(I) primarily used for, and integral to, the production of a semiconductor,

"(II) physically incorporated into a finished semiconductor, and

"(III) any of the following:

"(aa) SUBSTRATE.—Any substrate of silicon, silicon carbide, gallium nitride, gallium arsenide, indium phosphide, or other semiconductor-grade substrate material.

"(bb) THIN FILM OR LAYERING MATERIAL.—Any deposited metal, dielectric, barrier material, or dopant that forms the physical structure of a semiconductor.

"(cc) PACKAGING SUBSTRATE MATERIAL.—Any ceramic, organic, or metallic material that forms the physical base for semiconductor packaging.

"(dd) BONDING, INTERCONNECT, OR ADHESIVE MATERIAL.— Any wire bond, solder bump, lead frame, die attach adhesive, underfill, or other material which—

"(AA) forms electrical connections within a semiconductor, or

"(BB) provides structural integrity within a semiconductor.

"(iii) INDIRECT PRODUCTION MATERIAL.—

"(I) IN GENERAL.—For purposes of this subparagraph, the term 'indirect production material' means a material which is—

"(aa) a specialized material that is primarily used for, and integral to, the production, testing, inspection, or packaging of a semiconductor, ''(bb) not physically incorporated into a finished semiconductor, and

''(cc) any of the following:

''(AA) PROCESS CHEMICALS.—An etchant, deposition precursor, doping gas, or other chemical used in wafer fabrication.

''(BB) PHOTOLITHOGRAPHY MATERIAL.—A photoresist, photoresist ancillary material, developer, mask, or pellicle used in semiconductor patterning.

''(CC) CLEANING, PLANARIZATION, AND PREPARATION MATERIAL.—A solvent, surfactant, slurry, Chemical Mechanical Planarization (CMP) pad, conditioning disk, or cleaning agent used to prepare and maintain semiconductor manufacturing surfaces.

"(DD) TESTING AND INSPECTION MATERIAL.—A probe card, test socket, or optical inspection material.

"(EE) PACKAGING PROCESS MATERIAL.—A mold compound, encapsulant, or bonding wire used in assembly processes.

"(FF) FLUID-, GAS-, OR WAFER-HANDLING MATERIAL.—A polymer, elastomer, ceramic material and resultant tubings, fittings, vessels, filters, seals, or other such chemical-handling or wafer-handling material.

"(GG) WAFER PROCESSING CHAMBER MATERIALS.—Any process chamber materials used in production that play an active role in energy transmission, heat dissipation, plasma resistance, or chemical resistance.

"(HH) OTHER MATERIAL.—Any other material identified by the Secretary pursuant to subclause (II).

"(II) OTHER INDIRECT PRODUCTION MATERIALS.—For purposes of item (cc)(HH) of subclause (I), the Secretary (in consultation with the Secretary of Commerce) shall identify additional materials which are described in items (aa) and (bb) of such subclause.

"(III) EXCLUSION.—The term 'indirect production material' shall not include any material which—

"(aa) has a generic use, and

"(bb) is predominately used in an application other than semiconductor manufacturing.

"(iv) LIST OF SEMICONDUCTOR MATERIALS.—

"(I) IN GENERAL.—Not later than 180 days after the date of enactment of the Strengthening Essential Manufacturing and Industrial Investment Act, and annually thereafter, the Secretary, in consultation with the Secretary of Commerce, shall publish a list that sets forth the specifications, characteristics, and applications of materials that qualify as direct production materials and indirect production materials for purposes of clauses (ii) and (iii).

''(II) PETITION FOR INTERIM DETERMINATION.—In the case of any material which has not been included on the most recent list under subclause (I), a taxpayer may file a petition (at such time, and in such form and manner, as the Secretary may prescribe) with the Secretary for a determination of whether such material qualifies as a direct production material or indirect production material for purposes of clauses (ii) and (iii).''.

(b) EFFECTIVE DATE.—The amendment made by this section shall apply to property placed in service after the date of enactment of this Act.