IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

GREENTHREAD, LLC **Plaintiff,** **vs.** **ON SEMICONDUCTOR CORPORATION; SEMICONDUCTOR COMPONENTS INDUSTRIES, LLC D/B/A ON SEMICONDUCTOR LLC** **Defendant.**	**Civil Action No. 23-cv-443-RGA** **JURY TRIAL DEMANDED**

PLAINTIFF'S SUPPLEMENTAL IDENTIFICATION OF
ACCUSED PRODUCTS AND ASSERTED PATENTS

Pursuant to Paragraph 3(g)(i)(1) of the entered Scheduling Order (D.I. 24), Plaintiff Greenthread, LLC ("Greenthread") provides its Supplemental Identification of Accused Products and Asserted Patents to Defendants On Semiconductor Corporation and Semiconductor Components Industries, LLC, d/b/a On Semiconductor LLC (collectively "onsemi" or "Defendant").

Greenthread's disclosures are based on publicly available materials regarding the accused infringing products of onsemi. Greenthread does not yet have access to any of Defendant's discovery materials that may be relevant to its infringement claims and thus relies on publicly available materials. In light of the absence of discovery and reliance on publicly available materials, Greenthread has procured limited physical testing to the extent practicable, of certain products believed to be representative of, and similar to, the accused infringing products in pertinent respects. Greenthread explicitly reserves the right to supplement or alter its disclosures herein, as a matter of right, as permitted by the Court, based on the Court's claim constructions,

based on additional information obtained through formal discovery or other means, and/or based on other circumstances.

I. ASSERTED PATENTS

Based on the information presently available to it, Greenthread identifies the asserted patents that Greenthread alleges are infringed by Defendant, as set forth in the table below.

Asserted Patents
10,510,842 ("the '842 patent")
11,121,222 ("the '222 patent")

Greenthread explicitly reserves the right to supplement or alter its identification of asserted patents, as a matter of right, as permitted by the Court, based on any further claim constructions, additional information obtained through formal discovery or other means, and/or based on other circumstances.

II. ONSEMI ACCUSED PRODUCTS

Based upon information presently available to it, Greenthread asserts infringement by the accused products set forth below in this section. For each accused product identified below, Greenthread's contentions apply to the accused product and any other similar past, present, or future products, as well as systems incorporating the accused products or other products with the same or substantially similar features.

onsemi's Accused Products include products made (in whole or in part), used, sold, offered for sale, or imported into the United States by onsemi, that comprise or consist of the same or similar structures, features, or functionalities as the ON Semiconductor AR0820AT, ½" Format, 8.3 MP, 2.1 micrometer Pixel Pitch, Stacked Back-illuminated CMOS Image Sensor with DR-Pix Technology ("onsemi AR0820AT") shown in the Complaint (D.I. 1). onsemi Accused Products

each infringe one or more claims of the Asserted Patents. onsemi Accused Products include products from at least the following product categories/types: amplifiers, audio processors, digital-to-analog converters, analog-to-digital converters, digital clocks, interface ICs, isolation ICS, microcontrollers and processors, digital signal processors, digital light processors, motor drivers, power management, switches & multiplexers, radio frequency and microwave ICs, wireless connectivity ICs, logic & voltage translation, sensors, and other ICs. The following listing of onsemi semiconductor products is derived from publicly available information at onsemi's website, e.g., as noted in Exhibit 4 to Greenthread's Complaint (D.I. 1), and also from https://www.onsemi.com/products/new. Exhibit 4 to Greenthread's Complaint (D.I. 1) charts an exemplary product, the onsemi AR0820AT. The onsemi AR0820AT was released at least as early as 2020. https://www.digchip.com/datasheets/parts/datasheet/2/343/AR0820AT-pdf.php. At a minimum, onsemi had realized the benefits of the Asserted Patents in time for inclusion in products released at least as early as then, or on information and belief, even earlier. On information and belief, the onsemi Accused Products are fabricated using processes similar to, or later than, that of the process used to fabricate the onsemi AR0820AT.

The onsemi AR0820AT charted in Exhibit 4 to Greenthread's Complaint (D.I. 1) demonstrates how the onsemi AR0820AT includes dopant gradients as described and claimed in the Asserted Patents, which represent the accused devices, systems, and methods as per Paragraph 3(g)(i)(1) of the Scheduling Order (D.I. 24). The onsemi AR0820AT is representative of the onsemi Accused Products because upon information and belief, the other onsemi Accused Products would have similarly been advantageously designed to move carriers (e.g., towards the substrate) and achieve the performance enhancements described and claimed in the Asserted Patents. At a minimum, when the exemplary accused product was announced, onsemi had realized

the benefits of the Asserted Patents in time for inclusion in products released then or later. The other onsemi Accused Products designed after onsemi realized the benefits of Greenthread's technology would similarly have been designed with a dopant gradient in order to improve performance characteristics such as on and off switching times and other performance enhancements described in the Abstract of the Asserted Patents. Similarly, the other onsemi Accused Products would have been designed in a similar manner as the onsemi AR0820AT for purposes of this claim chart to achieve such performance enhancements (e.g., on and off switching times). Therefore, upon information and belief, the other onsemi Accused Products contain similar features as the onsemi AR0820AT transistors depicted in the claim charts in Exhibit 4 to Greenthread's Complaint (D.I. 1), and function in a similar way with respect to the features claimed in the asserted claims, and the other onsemi Accused Products contain similar features as the onsemi AR0820AT, and function in a similar way with respect to the features claimed in the asserted claims.

Greenthread is currently supplementing the list of onsemi Accused Products and reserves the right to further supplement the list of onsemi Accused Products as discovery proceeds and as permitted by the Court, the Local Patent Rules, the Federal Rules of Procedure, and any other applicable rules or law.

Accused Product/Part Number or Product Family	**Category**
AR0820AT	Image Sensors
Hyperlux image sensors	Image Sensors
NL17SZU04A	Buffers
NVHL070N120M3S	Silicon Carbide (SiC) MOSFETs
AFGHL40T120RWD	IGBTs
FGB5056G2-F085	IGBTs
FGB5065G2-F085	IGBTs

NVTFWS1D3N04XM	MOSFETs
NVTFWS4D9N04XM	MOSFETs
NTJD4152P	MOSFETs
NVJD4152P	MOSFETs
NCV59801	Linear Regulators (LDO)
NIV3071	Current Protection
NIS3071	Current Protection
BCP53M	General Purpose and Low VCE(sat) Transistors
BCP56M	General Purpose and Low VCE(sat) Transistors
AR0830	Image Sensors
AR2020	Image Sensors
NL17SZS11	Logic Gates
NCV-RSL15	Bluetooth
NCV8406DD1CR2G	Protected MOSFETs
NCP303160A	Integrated Driver & MOSFET
NCP81243	Controller
NCP81245	Controller
NCP81246	Controller
NCP81248	Controller
NCP81255	Voltage Regulator
NCP81537	Controller
NCP81538	Controller
NFAM3512L7B	Intelligent Power Modules (IPMs)
NFAM1512L7B	Intelligent Power Modules (IPMs)
NFAM2512L7B	Intelligent Power Modules (IPMs)
NCP59744	Voltage Regulator
NCP59748	Voltage Regulator
NCP252160	Integrated Driver & MOSFET
NB3L202K	Fanout Buffer
NB3L204K	Fanout Buffer
NB3N1900K	Fanout Buffer

Dated: November 10, 2023

McKool Smith, P.C.

/s/ Alan L. Whitehurst

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ATTORNEYS FOR PLAINTIFF GREENTHREAD, LLC

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the above and foregoing document has been served on all counsel of record via email on November 10, 2023.

/s/ Alan L. Whitehurst
Alan L. Whitehurst