# UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD SEMICONDUCTOR COMPONENTS INDUSTRIES, LLC d/b/a ON SEMICONDUCTOR Petitioner v. POWER INTEGRATIONS, INC. Patent Owner Case IPR2016-01600 Patent No. 7,834,605

### DECLARATION OF DR. ARTHUR W. KELLEY

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		1. "A power supply regulator, comprising"	34		
		2. "a comparator having a first input coupled to sense a voltage representative of a current flowing through a switch during an time of the switch, the comparator having a second input couple to receive a variable current limit threshold that increases dur the on time of the switch"	led ing		
		3. "a feedback circuit coupled to receive a feedback signal representative of an output voltage at an output of a power supply"	36		



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		. "a control circuit coupled to generate a control to an output of the comparator and in response to feedback circuit, the control signal to be coupled terminal of the switch to control switching of the	to an output of the d to a control
		. "wherein, for each of a plurality of consecutive of cycles each having a first state and a second state current limit threshold increases during at least first state of each control signal cycle and decreases a portion of the second state of each control."	te, the variable a portion of the ases during at
	C.	Dependent Substitute Claims 14-16 Are Supported Application	•
		. Claim 14: "The power supply regulator of claim comprising an oscillator having a first output to sawtooth waveform, wherein the variable currengenerated in response to the sawtooth waveform	generate a at limit threshold is
		Claim 15: "The power supply regulator of claim the control circuit includes a latch to provide the wherein the latch includes a reset input coupled comparator."	e control signal, to the output of the
		. Claim 16: "The power supply regulator of claim a duty cycle of the control signal is modulated in output of the feedback circuit."	response to an
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	D.	No Known Prior Art Discloses the New Limitations Proposed Substitute Claims 13-16 and Therefore No Anticipates the Substitute Claims	o Known Prior Art



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Case IPR2016-01600

Attorney Docket No: 10256-0021IPC

I, Arthur W. Kelley, of Cary, North Carolina, declare that:

#### I. INTRODUCTION AND SCOPE OF WORK

- 1. I have been retained by Patent Owner Power Integrations, Inc.

  ("Power Integrations" or "Patent Owner") in the above-captioned *Inter Partes*Review (IPR) as an independent expert in the relevant field.
- 2. I have been asked to provide my independent analysis regarding the *inter partes* review initiated by petitioner Semiconductor Components Industries, LLC d/b/a ON Semiconductor ("ON Semiconductor" or "Petitioner") related to U.S. Patent No. 7,834,605 ("the '605 patent"), which is assigned to Patent Owner. I have been asked to consider what one of ordinary skill in the art as of the effective filing date of the '605 patent would have understood from the '605 patent, including scientific and technical knowledge related to the '605 patent. I have also been asked to consider issues relating to the substitute claims proposed by Patent Owner.
- 3. I understand that Patent Owner is presently moving to amend U.S. Patent No. 7,834,605 ("the '605 patent"). I further understand that the motion seeks to cancel claims 1, 2, 5, and 9 and substitute them with proposed substitute claims 13, 14, 15, and 16, respectively. In particular, PI's proposed amendment adds a new limitation to original independent claim 1 (resulting in proposed substitute independent claim 13) and modifies dependent claims 2, 5, and 9 such



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