

**Samsung Electronics Co., LTD and Dell
Technologies Inc.**

v.

MyPAQ Holdings LTD.

Patent Owner Demonstratives

IPR 2022-00312

U.S. Patent No. 7,675,759

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Overview

Background

“System Operational State of Said Load”

“Power Converter Operational State”

Power Converter “Controller”

Dependent Claims

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“System Operational State of Said Load”

“Power Converter Operational State”

Power Converter “Controller”

Dependent Claims

U.S Patent No. 7675759

United States Patent
i et al.

(10) Patent No.: **US 7,675,759 B2**
(45) Date of Patent: **Mar. 9, 2010**

POWER SYSTEM WITH POWER CONVERTERS HAVING AN ADAPTIVE CONTROLLER

3,622,868 A 11/1971 Todd

(Continued)

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FOREIGN PATENT DOCUMENTS

JP 3-215911 9/1991

(Continued)

Assignee: **Flextronics International USA, Inc.**, San Jose, CA (US)

OTHER PUBLICATIONS

Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 248 days.

Ajram, S., et al., "Ultrahigh Frequency DC-to-DC Converters Using GaAs Power Switches," IEEE Transactions on Power Electronics, Sep. 2001, pp. 594-602, vol. 16, No. 6, IEEE, Los Alamitos, CA.

No.: **11/710,276**

(Continued)

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Prior Publication Data

08/0130322 A1 Jun. 5, 2008

(57) **ABSTRACT**

Related U.S. Application Data

Continuation-in-part of application No. 11/607,325, filed Dec. 1, 2006.

A power system having a power converter with an adaptive controller. The power system is coupled to a load and includes a power system controller that receives a signal indicating a system operational state of the load and selects a power converter operational state as a function thereof. The power system also includes a power converter with a power switch that conducts for a duty cycle to provide a regulated output characteristic at an output thereof. The power converter also includes a controller that receives a command from the power system controller to enter the power converter operational state and provides a signal to control the duty cycle of the power switch as a function of the output characteristic and in accordance with the command, thereby regulating an internal operating characteristic of the power converter to improve an operating efficiency thereof as a function of the system operational state.

3/335 (2006.01)

Int. Cl. Class. **H02M 3/335** (2006.01)

Classification Search **363/21.01**

363/37, 40, 41, 47, 48, 95, 97, 131, 132, 363/21.01; 323/355, 362

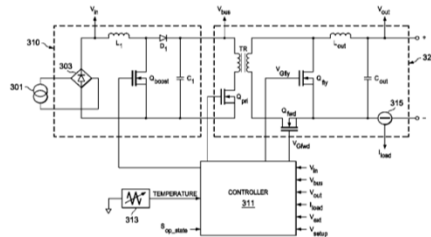
Application file for complete search history.

References Cited

U.S. PATENT DOCUMENTS

- 8 A 5/1921 Stoekle
- 0 A 12/1967 Grosseohme
- 8 A 3/1969 Woelber
- 0 A 1/1971 Cielo et al.

20 Claims, 9 Drawing Sheets



Ex. 1001 [514 Patent]

- **Effective Filing Date: December 1, 2006**

Ground	Claims	Statutory Basis (35 U.S.C. §)	Prior Art
1A	1-3, 5-13, 15-20	102	Hirst
1B	1-3, 5-13, 15-20	103	Hirst
2A	1-2, 4-6, 11, 14-16, 20	102	Chagny
2B	1-2, 4-6, 11, 14-16, 20	103	Chagny
2C	3, 12-13, 19	103	Chagny, Clark
3	1-2, 4-6, 11, 14-16, 20	103	Hwang

'759 Patent: Representative Claim 6

6. A power system coupled to a load, comprising:
a power system controller configured to receive a signal indicating a system operational state of said load and to select a power converter operational state as a function thereof; and
a power converter, including:
a power switch configured to conduct for a duty cycle to provide a regulated output characteristic at an output thereof, and
a controller configured to receive a command from said power system controller to enter said power converter operational state and to provide a signal to control said duty cycle of said power switch as a function of said output characteristic and in accordance with said command, thereby regulating an internal operating characteristic of said power converter to improve an operating efficiency thereof as a function of said system operational state.

Ex. 1001 ['759 Patent] 23:7-24

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