EXHIBIT 11



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(12) United States Patent

Sadowski et al.

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(54) VIDEO DECODER WITH REDUCED POWER CONSUMPTION AND METHOD THEREOF

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patent is extended or adjusted under 35

U.S.C. 154(b) by 0 days.

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(51) Int. Cl. *H03M 1/12* (2006.01)

See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

5,711,672 5,719,800 5,734,779 6,332,168 6,477,654	A A * B1 B1	2/1998 3/1998 12/2001 11/2002	Redford et al. Mittal et al. Okino
6,795,930 6,957,422 6,978,085 7,174,392	B2 B1*	10/2005	Maeda et al 386/112

7,227,847	B2	6/2007	Gluck
7,372,999	B2 *	5/2008	Oneda et al 382/232
7,401,240	B2	7/2008	Heller et al.
2003/0184271	A1	10/2003	Aisaka et al.
2004/0010785	A1	1/2004	Chauvel et al.
2004/0039954	A1	2/2004	White et al.
2004/0136596	A1*	7/2004	Oneda et al 382/232
2004/0158748	A1*	8/2004	Ishibashi et al 713/300
2004/0158752	A1	8/2004	Borza et al.
2004/0268316	A1	12/2004	Fisher et al.
2005/0081107	A1	4/2005	DeWitt, Jr. et al.
2005/0200627	A1	9/2005	Desylva
2005/0232136	A1*	10/2005	Kwak 370/208
2005/0273636	A1	12/2005	Grobman
2006/0044468	A1*	3/2006	Chowdhury et al 348/465
2006/0123262	A1	6/2006	Bullman

(Continued)

OTHER PUBLICATIONS

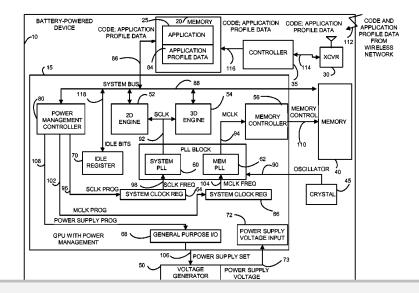
International Search Report and Written Opinion; International Application No. PCT/US2007/077346; dated Aug. 14, 2008.

Primary Examiner—Brian Young (74) Attorney, Agent, or Firm—Vedder Price P.C.

(57) ABSTRACT

A video decoder (10) with reduced power consumption includes a power management controller (45) that is operative to select one of a plurality of different power consumption states for a video decoder (10), and, in response to the determination, vary power consumption of at least one operational portion of the video decoder (10). In addition, in one example, a method (200) for reducing power consumption for a video decoder (10) includes determining input stream encoding description data (34) to select one of a plurality of different power consumption states for a video decoder (10) and, in response to the determination, varying power consumption of at least one operational portion of the video decoder (10).

26 Claims, 12 Drawing Sheets





US 7,804,435 B2

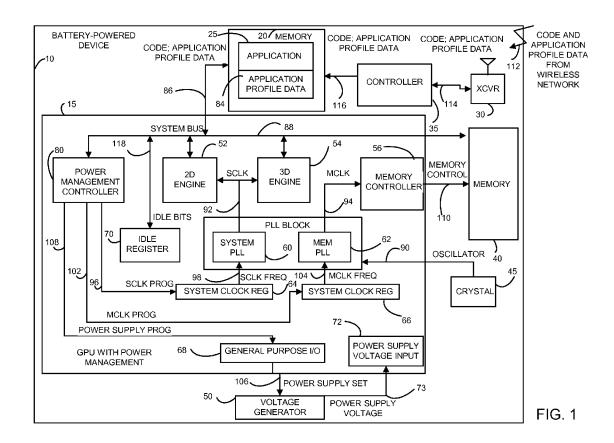
Page 2

 U.S. PATENT DOCUMENTS
 2008/0059823 A1
 3/2008 Balatsos et al.

 2006/0136764 A1 2007/0064159 A1*
 6/2006 Munguia Kim et al.
 * cited by examiner

 * cited by examiner





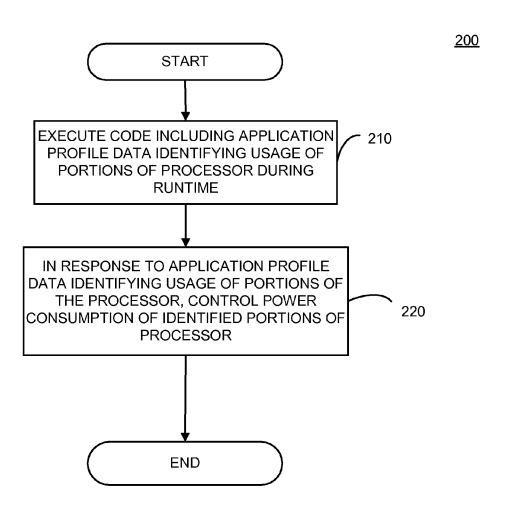


FIG. 2



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