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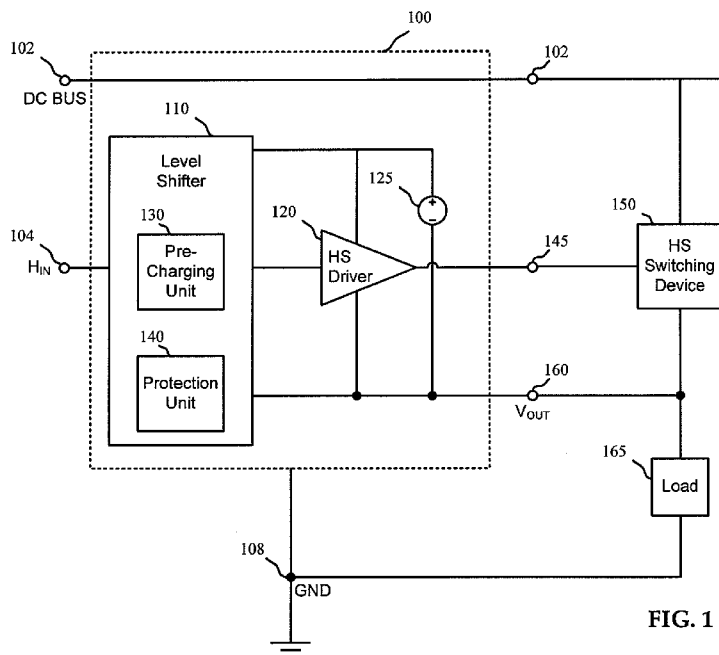
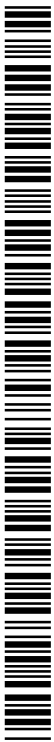


FIG. 1

(57) Abstract: Methods, systems, and devices are described for providing voltage level shifting that may operate reliably and at low power, even at high voltages and/or high switching frequencies. Embodiments receive an input signal representing input information, and effectively generate two voltage responses as a function of the input signal. Each voltage response includes exponential terms as a function of resistive and capacitive loading effects of components of the embodiments. A combined response signal is generated substantially as a superposition of the first response signal and the second response signal. A high-side driver signal is then generated as a function of the combined response signal, such that the high-side driver signal substantially preserves the input information represented by the input signal, and such that the first exponential response and the second exponential response are substantially absent from the high-side driver signal.



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A. CLASSIFICATION OF SUBJECT MATTER**H03K 19/0185(2006.01)i, H03F 3/217(2006.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC: H03K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Utility models and applications for Utility models since 1975
Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal), IEEE & Keyword: "VOLTAGE," "SHIFTER," "CONVERTER," "LATCH," "CHARGE," and "SWITCHING"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6366482 B1 (Jeong Su Jeong) 02 April 2002 See the abstract; figures 1, 2 & 5; claims 1-10	1-24
A	US 5627489 A (Thomas A. Jochum) 06 May 1997 See the abstract; figures 1-5, 7, 9 & 12; claims 1-23	1-24
A	US 2007-0057898 A1 (Yoshiharu Nakajima) 15 March 2007 See the abstract; figures 1-5; claims 1-26	1-24
A	JP 2000-228628 A (SONY CORP.) 15 August 2000 See the abstract; figures 1 & 6; claims 1-8	1-24
A	WO 2007-100193 A1 (Young-Chang Cho) 07 September 2007 See the abstract; figures 2-6; claims 1-10	1-24

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

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