

## ARGUMENTS

Applicants respectfully request consideration of the After Final Reply under the After Final Consideration Pilot 2.0 program.

After the above amendment, claims 1-17 remain pending. The claims have been amended to reduce issues and place this case in better form for allowance or appeal. Rejected independent claims 1, 11 and 15 are define, for example, “a fourth switch...having a first terminal directly electrically connected to the second terminal of the second switch, a second terminal that is not directly electrically connected to a power supply or a common ground.” Claim 4 is amended to correct typos. All the amendments above are supported by the present specification (e.g., see Fig. 2(a)), and no new matter is added.

Claim 1 was rejected under 35 USC §102(b) as being anticipated by Schibata (US 2008/0080239 A1). Claims 1, 3, 4, 7, 8, 11, 12, 14, 15, and 16 were rejected under 35 USC §102(a) as being anticipated by Applicant's Admitted Prior Art (Figs. 1(a)-1(b) of the specification; hereinafter "AAPA"). These rejections are respectfully traversed.

The Applicant respectfully submits that the present Claim 1 is not anticipated/taught/suggested by Schibata, the AAPA, or a combination thereof. The

amendments submitted herewith clarify the distinction previously argued in response to the prior Action.

The configuration and operational principles of the data storage circuit shown in Fig. 1 of Schibata are different than those of the sense amplifier as recited in the present Claim 1. Although the Action asserts that Schibata teaches the first terminal of the fourth switch (61s) being electrically connected to the second terminal of the second switch (61q), the first terminal of 61s is actually electrically connected to the control terminal of the switch 61r, and the first terminal of the switch 61r is in turn electrically connected to the second terminal of the switch 61q. Accordingly, the first terminal of the fourth switch (61s) is not directly electrically connected to the second terminal of the second switch (61q) as recited in the present Claim 1, but is indirectly electrically connected. Thus, the configuration of the data storage circuit shown in Fig. 1 of Schibata is different than that of the sense amplifier as recited in the present Claim 1.

Further, the Action asserts that Schibata teaches the control terminal of the fourth switch (61s) receiving a sensing signal (DTG). However, the DTG is a control signal rather than a sensing signal according to the contents of Paragraphs [0073] and [0079] of Schibata (the signal DTG received by the control terminal, i.e. the

gate, of the transistor 61s is a control signal). This is because the DTG goes high for a moment and the transistor 61s constituting the DDC is turned on for a moment when a write command is inputted according to the descriptions in Paragraph [0073], Lines 1-3 of Schibata and other descriptions related to DTG signal therein. In contrast, the control terminal of the present Claim 1 receives a sensing signal instead. That is to say, whether the DTG signal received by the gate of the transistor 61s in Schibata is in a “high” status or a “low” status is decided by whether a write command is inputted, and the control terminal of the fourth switch receives a sensing signal (which is decided by the potential value of the sensing node SEN as shown in the present Fig. 2(a)) as recited in the present Claim 1 rather than a control signal. Therefore, the switch 61s shown in Fig. 1 of Schibata has operational principles different from those of the fourth switch as recited in the present Claim 1. A skilled person in the field would know that the configuration and operational principles of the switch 61s in Schibata are different from those of the fourth switch as recited in the present Claim 1. Accordingly, Claim 1 is not anticipated/taught/suggested by Schibata.

Although the Action asserts that the fourth switch is anticipated by the AAPA (INV2 in Fig. 1(a)), INV1 and INV2 of the present Fig. 1(a) are actually the two inverters of a latch circuit. INV2 of the AAPA is a NOT gate. However, this does

not disclose or suggest the claimed fourth switch that has a second terminal that is not directly electrically connected to a power supply or a common ground, The power terminal inherently configured inside INV2 (such as the CMOS inverter exemplified by Jang et al. (US 2002/0158660 A1; [0006]; FIG. 1) or Chao (US 2004/0000944 A1; [0008]-[0009]; FIG. 1a) as indicated in the Action, does not suggest the second terminal of the claimed fourth switch because the power terminals in the CMOS inverters as shown in FIG. 1 of Jang et al. and FIG. 1A of Chao are all directly electrically connected to either a power supply or a common ground (e.g., VDD/GND or VDD/VSS). Thus, the configuration and operational principles of the fourth switch of the present Claim 1 are different than those of the NOT gate (INV2) shown in Fig. 1(a) of the AAPA.

The claimed invention possesses the advantages of providing a current sensing type sense amplifier having better efficiency and a lower power loss over Schibata and the AAPA, and the efficiency is raised and the power loss is reduced through the addition of an auxiliary control switch to control a holding path more accurately. Accordingly, Claim 1 is not anticipated/taught/suggested by Schibata, the AAPA, or a combination thereof. Claims 2-4, and 7-8 are dependent from Claim 1.

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By the same token, because the present Claims 11 and 15 have similar technical features to those of Claim 1, the present Claims 11 and 15 are also patentable. Claims 12-14 are dependent from Claim 11, and Claims 16-17 are dependent from Claim 15. For at least the reasons above, the Applicant respectfully requests withdrawal of the rejections under 35 U.S.C. 102 and 103.

**Conclusion**

In view of the foregoing amendments and remarks, the Applicant respectfully requests reconsideration of all pending claims, and allowance at an early date would be appreciated.

If the Examiner has any questions or comments, the Examiner is invited to contact the undersigned by telephone so that any outstanding issues can be expeditiously resolved.

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Respectfully submitted,

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