

United States District Court,  
D. Delaware.

**MOSEL VITELIC CORP,**  
Plaintiff.

v.

**MICRON TECHNOLOGY, INC,**  
Defendant.

**Micron Technology, Inc,**  
Counter-Plaintiff.

v.

**Mosel Vitelic Corp. and Mosel Vitelic, Inc,**  
Counter-Defendants.

Civil Action No. 98-449-GMS

**March 14, 2000.**

Named Expert: N. Elton Dry

Lewis H. Lazarus, Morris James LLP, Richard D. Kirk, Bayard, P.A., Wilmington, DE, for Plaintiff.

Richard K. Herrmann, Morris James LLP, Wilmington, DE, for Defendant.

***ORDER CONSTRUING THE DISPUTED TERMS OF U.S. Patent No. 5,412,257***

**GREGORY M. SLEET, District Judge.**

After considering the submissions of the parties and hearing oral argument on the matter, IT IS HEREBY ORDERED, ADJUDGED, and DECREED that, as used in the asserted claims of U.S. Patent No. 5,412,257,

1. The term "a full 2 VCC," in claims 9 and 12, means "a voltage of a magnitude that is equal to two times the absolute value of an operating voltage VCC of an integrated circuit;"
2. The term "boosted to 2 VCC," in claim 9, means "charging the second node to a voltage of at least 2 VCC;"
3. The term "first voltage generation circuit," in claim 9, means "a circuit, including the second charge pump, which pumps charge to the first node;"
4. The term "a voltage higher than 2 VCC," in claims 9 and 28, means "a voltage which is a threshold voltage (V<sub>th</sub>) higher than at least 2 VCC;"
5. The term "second charge pump," in claim 9, means "a charge pump which transfers a second charge to

the first node;" this second charge pump is not cascaded, *i.e.*, not connected in series, with the first charge pump and its charge originates on a separate path than the first charge transferred by the first charge pump;

6. The term "above 2 VCC," in claim 9, means "a voltage which is a threshold voltage (V<sub>th</sub>) higher than at least two times the supply voltage (2 VCC) on the first node;"

7. The term "can couple a full 2 VCC," in claim 9, means that the first transistor is able to actually pump a voltage equal to 2 VCC from the second node to the capacitive load;

8. The term "from the second node to the capacitive load," in claim 9, means that the first charge pump couples the charge from the second node to the capacitive load;

9. The term "second voltage generation circuit for developing a voltage of 2 VCC at said third node," in claim 9, means "a circuit that can actually generate a voltage with a magnitude of 2 VCC at the third node;"

10. The term "charge from the first pump input," in claim 12, means "the charge which is transferred from the first pump input to the first pump output *via* the first transistor which couples the two;"

11. The term "internal node distinct from said first pump input," in claim 12, means "an internal node which is separate from the first pump input yet coupled to the control electrode of the first transistor;"

12. The term "second charge pump for pumping said internal node," in claims 12 and 29, means "a charge pump which transfers a second charge to the internal node;" this second charge pump is not cascaded, *i.e.*, not connected in series, with the first charge pump and its charge originates on a separate path than the first charge transferred by the first charge pump;

13. The term "voltage sufficient to permit," in claim 12, means "a voltage which is a threshold voltage (V<sub>th</sub>) higher than at least two times the supply voltage (2 VCC) on the first node;"

14. The term "to develop a full 2 VCC," in claim 12, means that the first transistor is able to actually pump a voltage equal to 2 VCC at the first charge pump output;

15. The term "relatively high efficiency," in claim 12, means "a level of efficiency that is greater than that of the prior art two-stage pumps operating at the same output and voltage level;"

16. The term "single stage," in claims 20 and 21, means "a charge pump that has only one pumping stage, *i.e.*, a charge pump which is not cascaded;"

17. The term "driving said first node to 2 VCC," in claim 28, means "charging the first node to a voltage of at least 2 VCC;"

18. The term "transfer the voltage on said first node to a capacitive node," in claim 28, means that the voltage on the first node is transferred to the capacitive node;

19. The term "second charge pump," in claims 28 and 29, means "a charge pump which transfers a second charge to the control electrode;" this second charge pump is not cascaded, *i.e.*, not connected in series, with the first charge pump and its charge originates on a separate path than the first charge which is transferred

by the first charge pump;

20. The term "voltage higher than 2 VCC," in claim 28, means "a voltage which is a threshold voltage ( $V_{th}$ ) higher than at least two times the supply voltage (2 VCC) on the first node;"
21. The term "to develop a high voltage," which appears in the preamble of claim 29, is not a claim limitation which requires interpretation;
22. The term "without cascading," in claim 29, means that the first and second charge pumps are not connected in series and that the charges from these pumps originate on separate paths;
23. The term "current at the second pump output node is not transferred or pumped to the first pump output node," in claim 29, means that there is no current flow from the second pump output node to the first pump output node;
24. The term "voltage higher at the internal node," in claim 29, means that the voltage on the internal node is greater than the voltage at the first capacitor; and
25. The term "voltage development at said first capacitor," in claim 29, means "the voltage which is developed at the first capacitor."

D.Del.,2000.

Mosel Vitelic Corp. v. Micron Technology, Inc.

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