
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G/A

Under the Securities Exchange Act of 1934
(Amendment No. 17)

VICOR CORPORATION

(Name of Issuer)

Common Stock, Par Value \$.01 Per Share

(Title of Class of Securities)

925815 10 2

(CUSIP Number)

December 31, 2009

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
 - Rule 13d-1(c)
 - Rule 13d-1(d)
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1	NAME OF REPORTING PERSON I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY) Patrizio Vinciarelli	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="radio"/> (b) <input type="radio"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 20,706,868
	6	SHARED VOTING POWER 0
	7	SOLE DISPOSITIVE POWER 20,706,868
	8	SHARED DISPOSITIVE POWER 0
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 20,706,868	
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="radio"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 50.6%	
12	TYPE OF REPORTING PERSON IN	

CUSIP No.

13G/A

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ITEM 1(A). NAME OF ISSUER:

Vicor Corporation

ITEM 1(B). ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES:

25 Frontage Road, Andover, MA 01810

ITEM 2(A). NAME OF PERSON FILING:

Patrizio Vinciarelli

ITEM 2(B). ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE:

Vicor Corporation, 25 Frontage Road, Andover, MA 01810

ITEM 2(C). CITIZENSHIP:

United States

ITEM 2(D) TITLE OF CLASS OF SECURITIES:

Common Stock, par value \$.01 per share

ITEM 2(E) CUSIP NUMBER:

925815 10 2

ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO RULE 13D-1(B), OR 13D-2(B) OR (C), CHECK WHETHER THE PERSON FILING IS A:

Not applicable

ITEM 4. OWNERSHIP.

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount beneficially owned: 20,706,868

As of December 31, 2009, Mr. Vinciarelli was the beneficial owner of 9,683,220 shares of Vicor Corporation Common Stock (which number includes 7,740 shares which Mr. Vinciarelli has the right to acquire upon the exercise of options to purchase Common Stock within 60 days of December 31, 2009). Additionally, he owned 11,023,648 shares of Vicor Corporation Class B Common Stock, which may be converted at any time into 11,023,648 shares of Common Stock.

(b) Percent of class:

50.6%

(c) Number of shares as to which such person has:

- (i) Sole power to vote or to direct the vote: 20,706,868
- (ii) Shared power to vote or to direct the vote: 0
- (iii) Sole power to dispose or to direct the disposition of: 20,706,868
- (iv) Shared power to dispose or to direct the disposition of: 0

ITEM 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS.

Not applicable.

ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON.

Not applicable.

ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY.

Not applicable.

ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP.

Not applicable.

ITEM 9. NOTICE OF DISSOLUTION OF GROUP.

Not applicable.

ITEM 10. CERTIFICATION.

Not applicable.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: February 11, 2010

/s/ Patrizio Vinciarelli
Name: Patrizio Vinciarelli
Title: Chairman of the Board, President and
Chief Executive Officer