
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form S-8
REGISTRATION STATEMENT
Under
THE SECURITIES ACT OF 1933

MICROVISION, INC.
(Exact name of registrant as specified in its charter)

Washington
(State or other jurisdiction of
incorporation or organization)

91-1600822
(IRS Employer
Identification No.)

19910 North Creek Parkway
Bothell, Washington 98011-3008
(Address, including zip code, of Principal Executive Offices)

1996 Stock Option Plan, as amended
Independent Director Stock Option Plan, as amended
Special Option Grants to Independent Directors

Richard A. Raisig
Chief Financial Officer
19910 North Creek Parkway
Bothell, Washington 98011-3008
(425) 415-6614
(Name, address, and telephone number of agent for service)

With copy to:
Christopher J. Voss, Esq.
Stoel Rives LLP
One Union Square, 36th Floor
Seattle, Washington 98101-3197

CALCULATION OF REGISTRATION FEE

Title of Securities to Be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Share (1)	Proposed Maximum Aggregate Offering Price (1)	Amount of Registration Fee
Common Stock	2,907,232 Shares	\$15.00	\$24,278,280	\$2,234

- (1) The proposed maximum offering price per share and the proposed maximum aggregate offering price were estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(h) under the Securities Act of 1933. Options for 20,000 shares are exercisable at \$13.52 per share, options for 57,232 shares are exercisable at \$15.00 per share and options for 2,830,000 shares are available for grant at indeterminate prices.

PART I

Information required by Part I of Form S-8 is omitted from this Registration Statement in accordance with Rule 428 under the Securities Act of 1933, as amended (the "Securities Act"), and the Note to Part I of Form S-8.

PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents By Reference.

The following documents filed by Microvision, Inc. ("Microvision"), with the Securities and Exchange Commission are incorporated herein by reference:

- (a) Microvision's latest annual report filed pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act").
- (b) All other reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act since the end of the fiscal year covered by the annual report or prospectus referred to in (a) above.
- (c) The description of the authorized capital stock of Microvision contained in its registration statement filed under Section 12 of the Exchange Act, including any amendment or report filed for the purpose of updating the description.

All reports and other documents subsequently filed by Microvision pursuant to Sections 13(a) and (c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities remaining unsold, shall be deemed to be incorporated by reference herein and to be a part hereof from the date of the filing of such reports and documents.

Any statement contained herein, or in a document all or a portion of which is incorporated or deemed to be incorporated by reference herein, shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein, or in any other subsequently filed document that also is or is deemed to be incorporated by reference herein, modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities.

Not Applicable.

Item 5. Interests of Named Experts and Counsel.

Not Applicable.

Item 6. Indemnification of Directors and Officers.

Article 7 of Microvision's Amended and Restated Articles of Incorporation authorizes Microvision to indemnify its directors to the fullest extent permitted by the Washington Business Corporations Act through the adoption of bylaws, approval of agreements, or by any other manner approved by the Board of Directors. In accordance therewith, Section 10 of Microvision's Amended and Restated Bylaws ("Bylaws") requires indemnification of present and past directors, as well as any person who, while a director, also was serving at the request of Microvision as an officer, employee or agent of Microvision or as a director, officer, employee or agent of another entity (each, an "Indemnitee"), who was or is made a party, or is threatened to be made a party to, or is involved in any threatened, pending, or completed action, suit or proceeding, whether formal or informal, civil, criminal, administrative or investigative (a "Proceeding"), because such Indemnitee is or was a director of Microvision. Section 10 of the Bylaws also provides that any Indemnitee who was or is made a party, or is threatened to be made a party, to any threatened, pending, or completed action or suit by or in the

right of Microvision to procure a judgment in its favor because such Indemnitee is or was a director of Microvision, will be indemnified and held harmless by Microvision to the fullest extent permitted by applicable law against all expense actually and reasonably incurred or suffered by such Indemnitee in connection with such action or suit; *provided* that the Indemnitee must have acted in good faith and in a manner that he or she reasonably believed to be in or not opposed to the best interests of Microvision; and *provided further* that no indemnification will be made in respect of any claim, issue or matter as to which such Indemnitee is adjudged liable to Microvision. Notwithstanding these indemnification obligations, no indemnification will be provided to any Indemnitee to the extent that such indemnification would be prohibited by the Washington Business Corporation Act or other applicable law as then in effect, nor, except with respect to proceedings seeking to enforce rights to indemnification, will Microvision indemnify any such person seeking indemnification in connection with a Proceeding initiated by such person except where such Proceeding was authorized by the Board of Directors.

Section 10 of the Bylaws also provides that expenses incurred in defending any Proceeding in advance of its final disposition may be advanced by Microvision to the Indemnitee upon receipt of an undertaking by or on behalf of such person to repay such amount if it is ultimately determined that such person is not entitled to be indemnified by Microvision, except where the Board of Directors adopts a resolution expressly disapproving such advancement.

Section 10 of the Bylaws also authorizes the Board to indemnify and advance expenses to officers, employees and agents of Microvision on the same terms and with the same scope and effect as the provisions thereof with respect to the indemnification and advancement of expenses of directors.

Item 7. Exemption From Registration Claimed.

Not Applicable.

Item 8. Exhibits.

- 4.1 Form of specimen certificate for common stock(1)
- 5.1 Opinion of Stoel Rives LLP
- 23.1 Consent of PricewaterhouseCoopers LLP
- 23.2 Consent of Stoel Rives LLP (included in Exhibit 5.1)
- 24.1 Power of attorney (set forth on signature page hereof)

(1) Incorporated by reference to Microvision's Form SB-2 Registration Statement, as amended, No. 333-5276- LA.

Item 9. Undertakings.

- (a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

- (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) that, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of the securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate,

the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

PROVIDED, HOWEVER, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Exchange Act that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Bothell, State of Washington on May 23, 2002.

MICROVISION, INC.

By: /s/ RICHARD F. RUTKOWSKI

Name: Richard F. Rutkowski
Title: President & Chief Executive Officer

Each of the undersigned hereby constitutes and appoints Richard F. Rutkowski and Richard A. Raisig, and each of them, his or her true and lawful attorney-in-fact and agent, with full power of substitution, for the undersigned and in his or her name, place and stead, in any and all capacities, to sign any or all amendments to this Registration Statement on Form S-8, and any other instruments or documents that said attorneys-in-fact and agents may deem necessary or advisable to enable Microvision, Inc., to comply with the Securities Act of 1933, as amended, and any requirements of the Securities and Exchange Commission in respect thereof, and to file the same, with all exhibits thereto, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that each such attorney-in-fact and agent, or his substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities indicated below on the 23rd day of May, 2002:

Signature

Title

/s/ RICHARD F. RUTKOWSKI

President, Chief Executive Officer and Director (Principal Executive Officer)

Richard F. Rutkowski

/s/ STEVEN R. WILLEY

Executive Vice President and Director

Steven R. Willey

<u>/s/ RICHARD A. RAISIG</u> Richard A. Raisig	Vice President, Chief Financial Officer and Director (Principal Financial Officer)
<u>/s/ JEFF WILSON</u> Jeff Wilson	Chief Accounting Officer (Principal Accounting Officer)
<u>Jacqueline Brandwynne</u>	Director
<u>/s/ JACOB BROUWER</u> Jacob Brouwer	Director
<u>/s/ RICHARD COWELL</u> Richard Cowell	Director
<u>/s/ WALTER J. LACK</u> Walter J. Lack	Director
<u>William A. Owens</u>	Director
<u>/s/ ROBERT A. RATLIFFE</u> Robert A. Ratliffe	Director
<hr/>	
<u>/s/ DENNIS REIMER</u> Dennis Reimer	Director

QuickLinks

[PART I](#) [PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT](#)

- [Item 3. Incorporation of Documents By Reference.](#)
- [Item 4. Description of Securities.](#)
- [Item 5. Interests of Named Experts and Counsel.](#)
- [Item 6. Indemnification of Directors and Officers.](#)
- [Item 7. Exemption From Registration Claimed.](#)
- [Item 8. Exhibits.](#)
- [Item 9. Undertakings.](#)

[SIGNATURES](#)

[QuickLinks](#) -- Click here to rapidly navigate through this document

EXHIBIT 5

STOEL RIVES LLP
600 University Street
Suite 3600
Seattle, Washington 98101-3197

May 23, 2002

Board of Directors
Microvision, Inc.
19910 North Creek Parkway
Bothell, Washington 98011-3008

Ladies and Gentlemen:

We have acted as counsel for Microvision, Inc. (the "Company"), in connection with the filing of a Registration Statement on Form S-8 (the "Registration Statement") under the Securities Act of 1933 covering an aggregate of 2,907,232 shares of Common Stock, no par value, of the Company (the "Shares") issuable thereby upon the exercise of options granted pursuant to certain option agreements with Independent Directors of the Company and upon the exercise of options granted pursuant to the Company's 1996 Stock Option Plan, as amended, and Independent Director Stock Option Plan, as amended (collectively, the "Plans"). We have reviewed the corporate action of the Company in connection with this matter and have examined such documents, corporate records and other instruments as we have deemed necessary for the purposes of this opinion.

Based upon the foregoing, it is our opinion that the Shares are duly authorized and, when issued and sold in accordance with the terms of the option agreements or the Plans, respectively, will be legally issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement.

Very truly yours,

STOEL RIVES LLP

QuickLinks

[EXHIBIT 5](#)

[STOEL RIVES LLP 600 University Street Suite 3600 Seattle, Washington 98101-3197](#)

[QuickLinks](#) -- Click here to rapidly navigate through this document

EXHIBIT 23.1

Consent of Independent Accountants

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 27, 2002, relating to the consolidated financial statements, which appears in Microvision, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2001.

PricewaterhouseCoopers LLP
Seattle, Washington
May 23, 2002

QuickLinks

[EXHIBIT 23.1](#)

[Consent of Independent Accountants](#)