ILLINOIS SUPERCONDUCTOR CORPORATION

Form S-3 January 08, 2001

1

SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

ILLINOIS SUPERCONDUCTOR CORPORATION (Exact name of registrant as specified in its charter)

DELAWARE
(State or other jurisdiction of incorporation or organization)

36-3688459
(I.R.S. Employer
Identification Number)

DR. GEORGE CALHOUN
CHIEF EXECUTIVE OFFICER
ILLINOIS SUPERCONDUCTOR CORPORATION
451 KINGSTON COURT
MT. PROSPECT, ILLINOIS 60056
(847) 391-9400

(Address, including zip code, and telephone number, including area code, of registrant's agent for service and principal executive offices)

With Copies to:
ANDREW L. WEIL, ESQ.
SONNENSCHEIN NATH & ROSENTHAL
8000 SEARS TOWER
CHICAGO, ILLINOIS 60606
(312) 876-8000

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: As soon as practicable after the effective date of this registration statement.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. [_]

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. [X]

If this form is filed to register additional securities for an offering pursuant to Rule $462\,(b)$ under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier

effective registration statement for the same offering. [_]

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [_]

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. [_]

2

CALCULATION OF REGISTRATION FEE

	Proposed maximum	
Title of each class of	aggregate	Amount of
securities to be registered	offering price	registration fee
Rights to Purchase common stock Common stock, par value \$0.001 per	N/A	(4)
share (1) (2)	\$20,000,000 (3)	\$5,000

- (1) Includes associated rights to purchase Series A junior participating preferred stock.
- (2) Pursuant to Rule 416(a), includes any additional securities that may be issued in connection with any stock split, stock dividend, or similar transaction.
- (3) Estimated pursuant to Rule 457(o).
- (4) Pursuant to Rule 457(g), no separate registration fee is required for the rights since they are being registered in the same registration statement as the common stock underlying the rights.

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

3

The information in this prospectus is not complete and may be changed. We may not sell these securities, or accept any offer to buy these securities, until the registration statement we have filed with the Securities and Exchange Commission becomes effective and we deliver this prospectus to you in final

Subject to Completion, dated January 5, 2001

form.

4

PRELIMINARY PROSPECTUS
ILLINOIS SUPERCONDUCTOR CORPORATION
RIGHTS OFFERING
OF SHARES OF COMMON STOCK
AT \$ PER SHARE
- If you held our common stock on , 2001, Illinois Superconductor Corporation has granted you rights to purchase additional shares of common stock. You have been granted rights for every share of common stock you held on that date. Each whole right entitles you to purchase one share of common stock for a subscription price of \$ _ per share. This is your "basic subscription privilege."
If you fully exercise your rights and other stockholders do not fully exercise their rights, you may be able to purchase additional shares at a subscription price of \$ per share. This is your "oversubscription privilege."
- We will not issue fractional rights or fractional shares. If the number of shares of common stock you held on the record date would result in your receipt of fractional rights, the number of rights issued to you is being rounded down to the nearest whole right. As a result, our stockholders of record that held fewer than shares as of, 2001 may not be receiving rights.
- Our common stock is traded on the over-the-counter bulletin board under the symbol "ISCO.OB." On January 4, 2001, the closing price for the common stock was \$2.19 per share.
- The rights are exercisable beginning on the date of this prospectus and expire on, 2001, at 5 p.m., New York City time (the "expiration date"). We have the option of extending the expiration date.
- The rights are non-transferable.
- We are conducting this offering to raise needed capital for our company. Without this capital, we may not be able to fund our operations at their current level past March 2001.
- We will use all net cash proceeds from this offering for general corporate purposes.
AN INVESTMENT IN THE SHARES OFFERED HEREBY ENTAILS A HIGH DEGREE OF RISK. SEE "RISK FACTORS" BEGINNING ON PAGE FOR INFORMATION THAT YOU SHOULD CONSIDER BEFORE DECIDING WHETHER TO EXERCISE YOUR SUBSCRIPTION RIGHTS.

Price us before expenses

Per Share	\$ _	\$_
Total	\$ _	\$_

- (1) Basic subscription price. The oversubscription price is \$___ per share.
- (2) Assumes basic subscription privilege is exercised in full. The actual proceeds will depend on the extent to which the basic subscription privilege and the oversubscription privilege are exercised.

Subscription Agent: LaSalle National Bank

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense. This rights offering is not being made, nor will we accept subscriptions for shares of common stock from any person in any jurisdiction in which this rights offering or the acceptance thereof would not be in compliance with the securities or "Blue Sky" laws of such jurisdiction.

The date of this Prospectus is _____, 2001.

5

TABLE OF CONTENTS

	Page
WHERE YOU CAN FIND MORE INFORMATION	i
PROSPECTUS SUMMARY	1
CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS	10
RISK FACTORS	11
THE RIGHTS OFFERING	21
USE OF PROCEEDS	27
DETERMINATION OF SUBSCRIPTION PRICE	27
PRICE RANGE OF COMMON STOCK AND DIVIDEND POLICY	28
DESCRIPTION OF SECURITIES	29
CERTAIN UNITED STATES FEDERAL INCOME TAX CONSEQUENCES	30
PLAN OF DISTRIBUTION	31
LEGAL MATTERS	31
EXPERTS	31

6

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission. These filings are available to the public from commercial document retrieval services and from the SEC's web site at http://www.sec.gov. You may also read and copy any document we file at the SEC's public reference rooms at 450 Fifth Street, N.W., Washington, D.C. 20549, and in New York, New York and Chicago, Illinois. Please call the SEC at 1(800) SEC-0330 for further information on the public reference rooms and copy charges.

The SEC allows us to "incorporate by reference" the information we file with it. This permits us to disclose important information to you by referencing these filed documents. We incorporate by reference in this prospectus the following documents which have been filed with the SEC (File No. 0-22302):

- Our Annual Report on Form 10-K for the fiscal year ended December 31, 1999, filed with the SEC on March 22, 2000;
- Our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2000, filed with the SEC on May 12, 2000;
- Our Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2000, filed with the SEC on August 11, 2000;
- Our Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2000, filed with the SEC on November 14, 2000.
- Our Current Report on Form 8-K concerning the investment of \$4 million into our company by Elliott Associates, L.P., Elliott International, L.P. (formerly known as Westgate International, L.P.) and Alexander Finance, L.P., filed with the SEC on March 28, 2000;
- Our Current Report on Form 8-K concerning our earnings report for the quarter ended March 31, 2000, filed with the SEC on May 15, 2000;
- Our Current Report on Form 8-K concerning the announcement of our agreement to acquire Spectral Solutions, Inc. for 3.5 million shares of our common stock, filed with the SEC on May 19, 2000;
- Our Current Report on Form 8-K concerning the adjournment of our annual meeting until July 18, 2000 and the Extension Letter received from Elliott Associates, L.P., Elliott International, L.P. (formerly known as Westgate International, L.P.,) and Alexander Finance, L.P. regarding their agreement to refrain from exercising redemption rights in connection with their convertible notes, filed with the SEC on July 7, 2000;
- Our Current Report on Form 8-K concerning stockholder approval obtained at our annual meeting of all proposals contained in our proxy material, filed with the SEC on July 18, 2000;
- Our Current Report on Form 8-K concerning our opening of an office in Japan, filed with the SEC on August 7, 2000;
- Our Current Report on Form 8-K concerning the announcement of our

acquisition of Spectral Solutions, Inc. and the appointment of Dr. Richard Herring, CEO of Spectral Solutions, Inc. prior to the merger, to our Board of Directors, filed with the SEC on August 10, 2000;

- Our Current Report on Form 8-K concerning our earnings report for the quarter ended June 30, 2000, filed with the SEC on August 14, 2000;
- Our Current Report on Form 8-K concerning our acquisition of Spectral Solutions, Inc., filed with the SEC on August 23, 2000, and our amended Current Report on Form 8-K/A setting forth the financial statements for such acquisition filed with the SEC on October 20, 2000;
- Our Current Report on Form 8-K concerning our receipt of an initial order for the deployment of HTS filter systems by Telefonica, a telecommunications operating company in Spain, filed with the SEC on September 22, 2000;

7

- Our Current Report on Form 8-K reporting on an additional \$5
 million investment in our company by Elliott Associates, L.P. and
 an affiliated investment firm, filed with the SEC on October 26,
 2000.
- Our Current Report on Form 8-K announcing that we had entered into an agreement to acquire Lockheed Martin Canada's Adaptive Notch Filtering ("ANF") business unit, filed with the SEC on November 2, 2000.
- Our Current Report on Form 8-K reporting on our change in certifying accountants, filed with the SEC on December 13, 2000.
- Our Current Report on Form 8-K reporting on the acquisition of Lockheed Martin Canada Inc.'s Adaptive Notch Filtering business unit and the appointment of Daniel Spoor, President and CEO of Lockheed Martin Canada Inc., to our Board of Directors, filed with the SEC on December 27, 2000.
- Our Current Report on Form 8-K concerning our acquisition of the Adaptive Notch Filtering business unit of Lockheed Martin Canada Inc., and reporting on the conversion of senior convertible notes by certain of our principal stockholders, filed with the SEC on January 4, 2001.
- Our definitive Proxy Statement filed with the SEC on April 7, 2000 and our additional definitive proxy materials filed with the SEC on June 9, 2000.
- The description of our common stock contained in our Registration Statement on Form 8-A, as amended, and any other amendments or reports for the purpose of updating that description.

We incorporate by reference all documents filed pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 after the date of this prospectus and prior to the termination of this offering.

We will provide promptly without charge to you, upon written or oral

request, a copy of any document incorporated by reference in this prospectus, other than exhibits to such documents unless such exhibits are specifically incorporated by reference in such documents. Requests should be directed as follows:

Illinois Superconductor Corporation 451 Kingston Court Mt. Prospect, Illinois 60056 (847) 391-9400

You should request any such information at least five days in advance of the date on which you expect to make your decision with respect to this offer. In any event, you must request such information prior to $__$, 2001.

You should rely only on the information contained in this prospectus and the information to which we have referred you. We have not authorized anyone else to provide you with information different. If anyone provides you with different or inconsistent information, you should not rely on it. You should not assume that the information in this prospectus is accurate as of any date other than the date on the front page of this prospectus. Also, you should not assume that there has been no change in our affairs since the date of this prospectus.

ii

8

PROSPECTUS SUMMARY

The following summary is qualified in its entirety by reference to, and should be read in conjunction with, the more detailed information contained or incorporated by reference in this prospectus. See "Where You Can Find More Information" on page i.

QUESTIONS AND ANSWERS ABOUT THIS RIGHTS OFFERING

- Q. What is a right?
- A. Rights give our stockholders the right to purchase additional shares of our common stock for \$ _ per share. On January 4, 2001, the closing price for our common stock on the over-the-counter bulletin board was \$2.19 per share.

You are receiving ___ rights for each share of common stock that you owned as of the close of business on the record date for this offering. Each right entitles you to purchase shares under a basic subscription privilege and an oversubscription privilege, as we explain below. The record date for this rights offering is January ___, 2001.

- Q. Why is the Company offering the rights?
- A. We are conducting this offering to raise needed capital for our company. Without this capital, we may not be able to fund our operations at their current level past March 2001. We chose this rights offering over other financing alternatives to provide stockholders with the opportunity to avoid dilution by participating in the issue of the shares of common stock on a pro rata basis. If this rights offering is fully subscribed, we would receive \$20,000,000 (before fees and expenses of this offering), and we expect that our capital requirements will be met for approximately 2 years. Our principal stockholders, holding in the aggregate approximately 65% of the outstanding shares of our common stock, have indicated their support of this rights offering, subject to their agreement with the pricing of the offering. If these principal stockholders exercise their basic subscription privilege in full, we expect to receive at least \$___ in this offering.

We will use the net proceeds of this offering for general corporate purposes. $\,$

- Q. What is the basic subscription privilege?
- A. By exercising your rights, you may purchase one share of common stock for every whole right issued to you, at the subscription price of \$ _ per share. For example, if you owned 100 shares of common stock on the record date, you have the right to purchase __ shares of common stock for \$ _ per share. This is your "basic subscription privilege."
- Q. What is the oversubscription privilege?
- A. The oversubscription privilege entitles you to subscribe to additional shares of our common stock at the price of \$__ per share, subject to the following conditions:
- You must exercise the oversubscription privilege at the same time you exercise your basic subscription privilege;
- You must exercise your basic subscription privilege in full;
- In exercising your oversubscription privilege, you pay the full subscription price for all of the shares you are electing to purchase; and
- Other stockholders receiving rights do not elect to purchase all of the shares offered under their basic subscription privilege.

If oversubscription requests exceed shares available, we will allocate the available shares pro rata among our stockholders that oversubscribed based on the number of shares each subscriber for additional shares has purchased under the basic subscription privilege.

- Q. Will I receive fractional rights or shares?
- A. We are not issuing fractional rights or shares. If the number of shares of common stock you held on the record date would result in your receipt of fractional rights, the number of rights issued to you is being rounded down to the nearest whole right. As a result, our stockholders of record that held fewer than ___ shares of common stock as of the record date may not be receiving rights.
- ${\tt Q.}$ Has the Board of Directors made a recommendation regarding this offering?
- A. Our Board of Directors makes no recommendation to you about whether you should exercise any rights.
- Q. How soon must stockholders act?

9

- A. The rights may be exercised beginning on the date of this prospectus and expire on _____, 2001, at 5:00 p.m., New York City time. The subscription agent must actually receive all required documents and payments before that date and time. Although we have the option of extending the expiration date, we currently do not intend to do so.
- Q. May I transfer my rights?
- A. No. The rights may be exercised only by the person to whom they are issued.

- Q. Am I required to subscribe in this rights offering?
- A. No. You are not required to exercise any rights, purchase any shares, or otherwise take any action in response to this rights offering.
- Q. What will happen if I do not exercise my rights?
- A. If you do not exercise any rights, the number of shares you own will not change, but your percentage ownership of our company will decline following this rights offering if any other stockholders exercise their rights.
- Q. May I change or cancel my exercise of rights after I send in the required forms?
- A. No. All exercises of rights are irrevocable.
- Q. Will my money be returned if this rights offering is cancelled?
- A. We may cancel or terminate this rights offering at any time prior to the expiration date. If we terminate or cancel this offering, we will return your subscription price, but without any payment of interest.
- Q. What should I do if I want to participate in this rights offering, but my shares are held in the name of my broker, dealer or other nominee?
- A. If you hold your shares of our common stock through a broker, dealer or other nominee (for example, through a custodian bank), then your broker, dealer or other nominee is the record holder of the shares you own. This record holder must exercise the rights on your behalf for shares you wish to purchase. Therefore, you will need to have your record holder act for you.

If you wish to participate in this rights offering and purchase shares, please promptly contact the record holder of your common stock. To indicate your decision with respect to your rights, you should complete and return to your

2

10

record holder the form entitled "Beneficial Owner Election Form." You should have received this form from your record holder with the other rights offering materials. If you did not receive this form, please contact Mackenzie Partners, our information agent, at (800) _____ (toll free).

- Q. What fees or charges apply if I purchase shares?
- A. We are not charging any fee or sales commission to issue rights to you or to issue shares to you if you exercise rights. If you exercise rights through a record holder of your shares, you are responsible for paying any fees that person may charge.
- Q. How do I exercise my rights?
- A. As a record holder of our common stock on the record date, you are receiving this prospectus, a subscription warrant evidencing your subscription rights and instructions on how to purchase shares. If you wish to participate in this rights offering, then before your rights expire, you must:

- (a) deliver a properly completed subscription warrant; and
- (b) deliver the subscription price by wire transfer of immediately available funds, certified or cashier's check drawn on a U.S. bank, or personal check that clears before expiration of the rights.

If you are exercising your oversubscription privilege, the subscription price for the oversubscription shares you wish to purchase must be paid with your basic subscription amount. We will return the subscription price for any part of your oversubscription that we are unable to honor after the end of the offering period, without interest.

- ${\tt Q.}$ What if I am unable to deliver my subscription warrant by the expiration time of this offering?
- A. There is an alternate procedure called "Notice of Guaranteed Delivery," which allows an extra three days to deliver the subscription warrant if full payment is received before the expiration date and a securities broker or qualified financial institution signs the "Notice of Guaranteed Delivery" form to guaranty that your properly completed subscription warrant will be timely delivered.
- Q. To whom should I send forms and payment?
- A. You should send your subscription documents and payment by mail or courier service to:

By Hand:	By First Class Mail:	By Overnight Courier:

For instructions on how your subscription payment should be sent to LaSalle National Bank, see "The Rights Offering--Required Forms of Payment of Subscription Price" on page __ . Securities brokers and other qualified financial institutions can use an alternate procedure called "Notice of Guaranteed Delivery." See "The Rights Offering--Special Procedure under `Notice of Guaranteed Delivery' Form" on page __ .

- Q. What should I do if I have other questions?
- A. If you have questions, need additional copies of offering documents or otherwise need assistance, please contact Mackenzie Partners at (800)

3

11

To ask other questions or to receive copies of our recent SEC filings, you can also contact us by mail or telephone, or refer to the other sources described under "Where You Can Find More Information" on page i of this prospectus.

4

12

OUR COMPANY

We were founded in 1989 by ARCH Development Corporation, an affiliate of the University of Chicago, to commercialize superconductor technologies initially developed by Argonne National Laboratory. Superconductor materials, when cooled below a critical temperature, are able to transmit an electric current with either no or minimal loss of energy.

We use our patented and proprietary high temperature superconductor ("HTS") materials, radio frequency ("RF") filter designs and cryogenic technologies to develop, manufacture and market high performance products designed to enhance the quality, capacity, coverage and flexibility of cellular and other wireless telecommunications services.

In August 2000, we acquired Spectral Solutions, Inc. ("Spectral Solutions") for our common stock valued at approximately \$14.3 million. Spectral Solutions develops cyrogenic superconducting radio frequency front-end systems for the wireless communications industry. In December 2000, we acquired Lockheed Martin Canada's Adaptive Notch Filtering business unit, in exchange for 2,500,000 shares of our common stock. The ANF business unit has developed a technology to monitor and suppress sources of narrow-band interference that can reduce quality and capacity of CDMA-based wireless systems.

We were incorporated in Illinois on October 18, 1989 and reincorporated in Delaware on September 24, 1993. Our principal executive offices are located at 451 Kingston Court, Mt. Prospect, Illinois 60056 and our telephone number is (847) 391-9400.

RECENT DEVELOPMENTS

Conversion of Senior Convertible Notes

On December 29, 2000, holders of our senior convertible notes converted \$14,354,778 principal amount of such notes plus accrued interest into 63,283,309 shares of common stock.

Change in Certifying Accountants

On December 7, 2000, we advised Ernst & Young LLP that we intended to retain a different firm of independent auditors for the audit of our financial statements for the fiscal year ending December 31, 2000. We have engaged Grant Thornton LLP as our new independent principal accountant to audit our consolidated financial statements. This engagement was effective as of December 7, 2000.

Further details concerning this part of the summary are set forth under "The Rights Offering" beginning on page $_$. Only holders of record of common stock at the close of business on the record date may exercise rights.

Securities Offered	We are offering shares of common stock to be issued upon exercise of the rights.
Record Date	, 2001. Only our stockholders of record as of the close of business on the record date will receive rights to subscribe for shares of common stock. Close of business means 5:00 p.m., New York City time.
Exercise Period	The rights may be exercised beginning on the date of this prospectus and expire on, 2001 at 5:00 p.m. (New York City time). Rights not exercised by the expiration date will be null and void. We have the option of extending the expiration date for any reason.
Basic Subscription	
Privilege	You are receiving rights for every share of common stock owned as of the record date. Each whole right entitles you to purchase one share of common stock for the subscription price.
	We are not issuing any fractional rights or fractional shares. If the number of shares of common stock you held of record on the record date would result in your receipt of fractional rights, the number of rights issued to you is being rounded down to the nearest whole right. So, for example, if you were the record holder of 100 shares of common stock on the record date, you are receiving rights to subscribe to shares of common stock instead of shares. Record owners of fewer than shares of common stock on the record date may not receive rights.
	You may not purchase fractional shares. You may, however, subscribe for any whole number of shares by exercising less than all of your rights.
Subscription Price	For the basic subscription privilege, \$ _ per share, payable in cash. For the oversubscription privilege, \$ _, also payable in

cash. All payments must be cleared on or before the expiration date.

summarize tax consequences arising under state tax laws, non-U.S. tax laws, or any tax laws relating to special tax circumstances or particular types of taxpayers.

Oversubscription Privilege..... If you fully exercise your basic subscription privilege, you may also purchase additional shares of common stock that are not purchased by other stockholders. If there are not enough shares available to fill all subscriptions for additional shares, the available shares will be allocated pro rata based on the number of shares each subscriber for additional shares has purchased under the basic subscription privilege. Use of Proceeds..... We will use the net proceeds of this offering for general corporate purposes. No Transferability of Rights..... The rights may be exercised only by the persons to whom they are granted. Our Board of Directors does not make No Board Recommendation..... any recommendation to 14 stockholders regarding the exercise of rights in this offering. No Revocation..... If you exercise any rights, you are not allowed to revoke or change your exercise or request a refund of monies paid. Certain United States Federal Income Tax Consequences..... For United States federal income tax purposes, we believe that a stockholder will not recognize taxable income upon the receipt or exercise of rights. See "Certain Federal Income Tax Consequences" beginning on page ___ . Each stockholder should consult the holder's own tax adviser concerning the tax consequences of this offering under the holder's own tax situation. This prospectus does not

Extension, Withdrawal and

Amendment	We have the option of extending this rights offering and the offering period, although we presently do not intend to do so. We also reserve the right to withdraw, terminate or amend this rights offering at any time for any reason. If this offering is withdrawn or terminated, or any submitted subscriptions no longer comply with the amended terms of this offering, we will return all funds received from such subscriptions, without interest.
Procedure for Exercising Rights	To exercise rights, you must complete the subscription warrant and deliver it to the subscription agent, LaSalle National Bank, with full payment for all the rights you elect to exercise. LaSalle National Bank must receive the proper forms and payments on or before the expiration date.
	You may deliver your subscription documents and payments by mail or commercial courier. If regular mail is used for this purpose, we recommend using insured, registered mail. You may use an alternative "Notice of Guaranteed Delivery" procedure if you are unable to deliver the subscription warrant before the expiration date, subject to the requirements of this procedure described under "The Rights OfferingSpecial Procedure under `Notice of Guaranteed Delivery' Form" on page
Shares of common stock Outstanding As of the Date of this Prospectus	shares of common stock
Shares of common stock Outstanding Upon Completion of Rights Offering	shares of common stock, if this rights offering is fully subscribed.

RISK FACTORS

Exercising your rights and purchasing our common stock involves a high degree of risk. Stockholders who exercise rights risk investment loss on new money invested. We cannot assure you that the subscription price will remain below any trading price for our common stock or that its trading price will not decline to below the subscription price during or after this rights offering. For more information regarding some of the risks inherent in this rights offering, please see "Risk Factors" beginning on page ____.

The summary historical financial data set forth below for the nine months ended September 30, 2000 and 1999, and the related balance sheet data as of September 30, 2000, are derived from the unaudited consolidated financial statements and notes contained in our quarterly report on Form 10-Q filed November 14, 2000, which are incorporated herein by reference and, in the opinion of our management, include all adjustments (consisting of only normal recurring adjustments) considered necessary for a fair presentation. The summary historical financial data set forth below for each of the years in the five-year period ended December 31, 1999 are derived from our consolidated financial statements and notes for the relevant periods, which were audited by Ernst & Young LLP, independent accountants.

	Nine Months Ended September 30,		Year E	
		1999	1999	1998
STATEMENT OF OPERATIONS				
DATA: Net sales	209,163	1,955,792	\$2,408,604	\$3 , 242 , 9
Costs and expenses:				
Cost of revenues	, ,	4,091,392		7,047,3
Research and development	, ,	1,364,168		2,934,7
Selling and marketing	760,852	1,210,844	1,581,545	1,847,6
General and administrative	4,480,444	2,130,452	2,617,809	3,370,0
Operating loss Other income (expense):	(8,477,603)	(6,841,064)	(9,471,137)	(11,956,9
Interest income	125,446	118,967	98,194	354 , 7
Interest expense	•			
Other income, net	1,876		36,623	
	(2,990,725)	, , ,		` ,
Loss before extraordinary item		(7,331,488)		
Extraordinary item-debt				
extinguishment	(28,297)	(73,000)	(745,197)	
Net Loss Preferred Stock dividends		(7,404,488)	(22,716,262)	(21,850,1 (61,8
TIETETICA DEGEN ATVIACNAS				
Net loss plus Preferred Stock				
dividends	(11,496,625)	(7,404,488)	\$(22,716,262)	\$(21,911,9
	========			
Basic and diluted loss per common share before extraordinary item	(0.37)	(0.58)	\$(1.71)	\$(1.
Extraordinary item-debt extinguishment		(0.01)	(0.06)	
Intraoramary room acce onerng				
Basic and diluted loss per common				
share				
	=======	========	========	========
Weighted average number of				
shares of common stock outstanding	31.140.954	12.651.819	12.841.497	11.345.5
ouestanding	========			

STATEMENT OF OPERATIONS DATA:		
Net sales	\$	27 , 830
Cost of revenues		19,286
Research and development	4.	554,946
Selling and marketing	- /	469,600
General and administrative	2.	763,615
Operating loss		779,617)
Other income (expense):	(' /	773,017
Interest income		487,543
Interest expense		(39,600)
Other income, net		
		447,943
Loss before extraordinary item Extraordinary item-debt	(7,	331,647)
extinguishment		
Net Loss Preferred Stock dividends	(7 ,	331,647)
Net loss plus Preferred Stock		001 (514)
dividends		331,674)
Basic and diluted loss per common		
share before extraordinary item	\$	(2.01)
Extraordinary item-debt extinguishment		
Basic and diluted loss per common		
share		\$(2.01)
Weighted average number of	====	
Weighted average number of shares of common stock		
	2	6/1 100
outstanding		641,196
	====	

8 16 BALANCE SHEET DATA

			As of Decemb	ber 31,	
	As of September 30, 2000	1999	1998	1997	1
					-
Cash and cash equivalents	\$ 1,046,326	\$ 723 , 711	\$ 2,152,595	\$ 2,766,886	\$ 5 ,
Working capital	2,088,731	831,724	4,190,548	4,668,982	5,
Total assets	19,599,182	6,039,159	10,028,088	11,534,309	13,
Long-term debt/capital lease obligations, less current					
portion	8,675,861	13,650,885	9,432,026	13,541	
Stockholders' equity (net capital deficiency)	5,683,485	(9,291,712)	(772 , 968)	10,046,569	11,

9

17

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Because we want to provide you with meaningful and useful information, this prospectus contains, and incorporates by reference, certain forward-looking statements that reflect our current expectations regarding our future results of operations, performance and achievements. We have tried, wherever possible, to identify these forward-looking statements by using words such as "anticipates," "believes," "estimates," "expects," "plans," "intends" and similar expressions. These statements reflect our current beliefs and are based on information currently available to us. Accordingly, these statements are subject to certain risks, uncertainties and contingencies, including the factors set forth under the caption "Risk Factors," which could cause our actual results, performance or achievements for 2001 and beyond to differ materially from those expressed in, or implied by, any of these statements. You should not place undue reliance on any forward-looking statements. Except as otherwise required by federal securities laws, we undertake no obligation to release publicly the results of any revisions to any such forward-looking statements that may be made to reflect events or circumstances after the date of this prospectus or to reflect the occurrence of unanticipated events.

10

18

RISK FACTORS

You should carefully consider the risks described below and the other information in this prospectus and in the documents incorporated by reference herein before deciding to purchase shares in this rights offering. Our shares are subject to significant investment risks. Many factors, including the risks described below and other risks we have not recognized, could cause our operating results to differ from our expectations and plans.

RISKS RELATED TO THE OPERATIONS AND FINANCING OF OUR COMPANY GENERALLY

Limited Operating History; History of Losses; and Uncertainty of Financial Results

We were founded in October 1989 and through 1996 were engaged principally in research and development, product testing, manufacturing, marketing and sales activities. We have incurred net losses since our inception. As of September 30, 2000, our accumulated deficit was approximately \$94,373,000. We have only recently begun to generate revenues from the sale of our RF filter products. Prior to the commencement of these sales, the majority of our revenues were derived from R&D contracts, primarily from the U.S. government. We do not expect revenues to increase dramatically until we ship a significantly larger amount of our RF products. Accordingly, we expect to continue to experience net losses, and we cannot be certain if or when we will become profitable. Spectral Solutions and the Adaptive Notch Filtering business unit of Lockheed Martin Canada, both of which we recently acquired, have similar operating histories and

financial uncertainties.

We have only a limited operating history upon which an evaluation of us and our prospects can be based. We must therefore be considered in light of the risks, expenses and difficulties frequently encountered by companies in their early stages of product commercialization.

Future Capital Needs

Although we have raised over \$10 million in equity capital during the past year, we anticipate that we will need additional cash to continue our operations at their current level past March 2001. If this rights offering is fully subscribed, we would receive \$20,000,000 (before fees and expenses of this offering), which should be sufficient to fund our operations at their current level for approximately two years. However, our planned expansion in sales of our RF filter product lines may require the commitment of substantial additional funding, beyond our current funding level, to continue product redesign, expansion of manufacturing capabilities and development of a sales and marketing effort to sell our RF front-end products.

The actual amount of our future funding requirements will depend on many factors, including: the amount and timing of future revenues, the level of product marketing and sales efforts to support our commercialization plans, the magnitude of our research and product development programs, our ability to improve product margins, the cost of additional plant and equipment for manufacturing and the costs involved in protecting our patents or other intellectual property.

Consequences of Inability to Obtain Adequate Future Funding

If we are unable to obtain adequate funds when needed in the future, we would be required to substantially delay, scale-back or eliminate the manufacturing, marketing or sales of one or more of our products or research and development programs, or may be required to obtain funds through arrangements with collaborative partners or others that may require us to relinquish rights to certain of our technologies, or potential products that we would not otherwise relinquish. In particular, if we do not secure adequate additional financing, we believe that we may not be able to continue as a going concern.

11

Qualified Audit Opinion

Ernst & Young's report on our financial statements for the years ended December 31, 1998 and December 31, 1999 contained an explanatory paragraph which stated that our history of operating losses and our need to obtain additional financing raised substantial doubt about our ability to continue as a going concern. Since the most recent opinion, we have raised in excess of \$10 million in external funding. However, the qualification of the audit opinion has raised the concerns of our suppliers and potential customers and has therefore had an adverse effect on our business.

Limited Experience in Manufacturing, Marketing and Sales

For us to be financially successful, we must manufacture our products in substantial quantities, at acceptable costs and on a timely basis. Although to date we have produced limited quantities of our products for commercial installations and for use in development and customer field trial programs, production of large quantities of our products at competitive costs presents a number of technological and engineering challenges for us. We may be unable to

manufacture such products in sufficient volume. We have limited experience in manufacturing, and substantial costs and expenses may be incurred in connection with attempts to manufacture larger quantities of our products. We may be unable to make the transition to large scale commercial production successfully.

Our marketing and sales experience to date is very limited. We will be required to further develop our marketing and sales force in order to effectively demonstrate the advantages of our products over more traditional products, as well as competitive superconductive products. We may also elect to enter into agreements or relationships with third parties regarding the commercialization or marketing of our products. If we enter into such agreements or relationships, we will be substantially dependent upon the efforts of others in deriving commercial benefits from our products. We may be unable to establish adequate sales and distribution capabilities, may be unable to enter into marketing agreements or relationships with third parties on financially acceptable terms, and any third parties with whom we enter into such arrangements may not be successful in marketing our products.

Management of Growth

Our growth to date has caused, and will continue to cause, a significant strain on our management, operational, financial and other resources. Our ability to manage growth effectively will require us to implement and improve our operational, financial, manufacturing and management information systems and expand, train, manage and motivate our employees. These demands may require the addition of new management personnel and the development of additional expertise by management. Any increase in resources devoted to product development and marketing and sales efforts could have an adverse effect on our financial performance in the next several fiscal quarters. If we were to receive substantial orders, we may have to expand our current facilities, which could cause an additional strain on our management personnel and development resources. The failure of our management team to effectively manage growth could have a material adverse effect on our business, operating results and financial condition.

RISKS RELATED TO OUR COMMON STOCK AND CHARTER PROVISIONS

Delisting of Common Stock

Our common stock was de-listed from trading on the Nasdaq National Market in June 1999 due to our inability to meet the net tangible assets requirement for continued listing. Our common stock is now traded in the over-the-counter market and quoted on the over-the-counter bulletin board. This may not provide the same liquidity for the trading of securities as the Nasdaq National Market. We intend to apply for relisting on the Nasdaq Stock Market when we are reasonably confident that our application would be approved.

Volatility of Common Stock Price

The market price of our common stock, like that of many other high-technology companies, has fluctuated significantly and is likely to continue to fluctuate in the future. Since January 1, 1999 and through December 31, 2000,

12

20

the closing price of our common stock has ranged from a low of \$0.3438 per share to a high of \$39.00 per share. Announcements by us or others regarding the receipt of customer orders, quarterly variations in operating results,

acquisitions or divestitures, additional equity or debt financings, results of customer field trials, scientific discoveries, technological innovations, litigation, product developments, patent or proprietary rights, government regulation and general market conditions may have a significant impact on the market price of our common stock. In addition, fluctuations in the price of our common stock could affect our ability to have our common stock accepted for listing on a securities market or exchange.

Substantial Number of Shares Eligible for Future Sale; Dilution

As of December 31, 2000, we had (i) outstanding warrants to purchase 95,533 shares of common stock at a weighted average exercise price of \$10.20 per share (the number of shares underlying these warrants will increase based on our issuance of stock under this rights offering, pursuant to the anti-dilution provisions of the warrant agreements) and (ii) outstanding options to purchase 5,315,096 shares of common stock at a weighted average exercise price of \$3.02 per share (3,774,078 of which have not yet vested) issued to employees, directors and consultants pursuant to our 1993 Stock Option Plan, the merger agreement with Spectral Solutions, and individual agreements with our management and directors. In order to attract and retain key personnel, we may issue additional securities, including stock options, in connection with our employee benefit plans, or may lower the price of existing stock options.

In December 2000, holders of our senior convertible notes converted \$14,354,778 principal amount of such notes plus accrued interest into 63,283,309 shares of common stock. We may in the future issue additional equity or rights to purchase equity, either alone, in connection with acquisition transactions or in connection with debt financings, at prices below the then-current market price of the common stock.

The exercise of options and warrants for common stock and the issuance of additional shares of common stock and/or rights to purchase common stock at prices below market value will be dilutive to existing stockholders and may have an adverse on the market value of the common stock.

Concentration of Our Stock Ownership

Our officers, directors and principal stockholders (holding greater than 5% of outstanding shares) together control approximately 66% of our outstanding voting power. This percentage may change as a result of this offering. Consequently, these stockholders, if they act together, would be able to exert significant influence over all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. In addition, this concentration of ownership may delay or prevent a change of control of our company, even when a change may be in the best interests of our stockholders. The interests of these stockholders may not always coincide with our interests as a company or the interests of other stockholders. Accordingly, these stockholders could cause us to enter into transactions or agreements that we would not otherwise consider.

Anti-Takeover Provisions

We have certain arrangements which may be deemed to have a potential "anti-takeover" effect in that such provisions may delay, defer or prevent a change of control of our company. In February 1996, our Board of Directors adopted a stockholders rights plan. In addition, our Certificate of Incorporation and By-Laws provide that (i) stockholder action may be taken only at stockholders meetings; (ii) the Board of Directors has authority to issue series of our preferred stock with such voting rights and other powers as the Board of Directors may determine; (iii) prior specified notice must be given by a stockholder making nominations to the Board of Directors or raising business matters at stockholders meetings; and (iv) the Board of Directors is divided

into three classes, each serving for staggered three-year terms. The effect of the rights plan and the anti-takeover provisions in our charter documents may be to deter business combination transactions not approved by our Board of Directors, including acquisitions that may offer a premium over market price to some or all of our stockholders.

13

2.1

TECHNOLOGY AND MARKET RISKS

Uncertain Market Acceptance of Superconducting Telecommunications Products

Our radio frequency ("RF") filter products, which are based on our high temperature superconductor ("HTS") technology, have not been sold in very large quantities and a sufficient market may not develop for our products. Our customers establish demanding specifications for performance and reliability. Our RF filter products may not continue to meet product performance and reliability criteria set by wireless communication service providers. We may be unable to manufacture adequate quantities of any products it develops at commercially acceptable costs or on a timely basis, or our current or future products may not achieve market acceptance. We have experienced, and may continue to experience, quarterly fluctuations in our results of operations as we attempt to gain market acceptance of our RF filter products while being subject to the lengthy testing process of customers. Failure to successfully develop, manufacture and commercialize products on a timely and cost-effective basis will have a material adverse effect on our business, operating results and financial condition.

Rapid Technological Change; Possible Pursuit of Other Market Opportunities

The field of superconductivity is characterized by rapidly advancing technology. Our success will depend in large part upon our ability to keep pace with advancing superconducting technology, high performance RF filter design and efficient, low cost cryogenic technologies. Rapid changes have occurred, and are likely to continue to occur, in the development of superconducting materials and processes. Our development efforts may be rendered obsolete by the adoption of alternative solutions to current wireless operator problems or by technological advances made by others. In addition, other materials or processes, including other superconducting materials or fabrication processes, may prove more advantageous for the commercialization of high performance wireless products than the materials and processes selected by us.

Focus on Wireless Telecommunications Market; Current and Future Competitive Technologies

Our principal target market for our superconductor-based products is wireless telecommunications. The devotion of substantial resources to the wireless telecommunications market makes us vulnerable to adverse changes in this market. Adverse developments in the wireless telecommunications market, which could come from a variety of sources, including future competition, new technologies or regulatory decisions, could affect the competitive position of wireless systems. Any adverse developments in the wireless telecommunications market during the foreseeable future would have a material adverse effect on our business, operating results and financial condition.

BUSINESS RISKS

Dependence on a Limited Number of Customers

To date, our marketing and sales efforts have focused on major cellular service providers in retrofit applications and, to a lesser extent, on PCS operators. During 1999, sales to three of our customers accounted for over 65% of our company's total revenues for 1999. Sales to these customers accounted for over 80% of our total revenues in the first nine months of 2000. We expect that if our RF filter products achieve market acceptance, a limited number of wireless service providers and Original Equipment Manufacturers ("OEMs") will account for a substantial portion our revenue during any period. Sales of many of our company's RF filter products depend in significant part upon the decision of prospective customers and current customers to adopt and expand their use of our products. Wireless service providers, wireless equipment OEMs and our other customers are significantly larger than, and are able to exert a high degree of influence over, us. Customers' orders are affected by a variety of factors such as new product introductions, regulatory approvals, end user demand for wireless services, customer budgeting cycles, inventory levels, customer integration requirements, competitive conditions and general economic conditions. The failure to attract new customers would have a material adverse effect on our business, operating results and financial condition.

Lengthy Sales Cycles

Prior to selling our products to our customers, we must generally undergo lengthy approval and purchase processes. Technical and business evaluation by potential customers can take up to a year or more for products based

14

22

on new technologies such as HTS. The length of the approval process is affected by a number of factors, including, among others, the complexity of the product involved, priorities of the customers, budgets and regulatory issues affecting customers. We may not obtain the necessary approvals or ensuing sales of such products may not occur. The length of our customers' approval process or delays could have a material adverse effect on our business, operating results and financial condition.

Dependence on Limited Sources of Supply

Certain parts and components used in our RF filter products, including substrates, vacuum components, and cryogenic coolers, are only available from a limited number of sources. Our reliance on these limited source suppliers exposes us to certain risks and uncertainties, including the possibility of a shortage or discontinuation of certain key components and reduced control over delivery schedules, manufacturing capabilities, quality and costs. Any reduced availability of such parts or components when required could materially impair the our ability to manufacture and deliver our products on a timely basis and result in the cancellation of orders, which could have a material adverse effect on our business, operating results and financial condition. In addition, the purchase of certain key components involves long lead times and, in the event of unanticipated increases in demand for our products, we may be unable to manufacture products in quantities sufficient to meet our customers' demand in any particular period. We have no guaranteed supply arrangements with our limited source suppliers, do not maintain an extensive inventory of parts or components, and customarily purchase parts and components pursuant to purchase orders placed from time to time in the ordinary course of business.

To satisfy customer requirements, we may be required to stock certain long lead time parts in anticipation of future orders. The failure of such orders to materialize as forecasted could limit resources available for other important purposes or accelerate our requirement for additional funds. In addition, such excess inventory could become obsolete, which would adversely affect our financial performance. Business disruption, production shortfalls or financial difficulties of a limited source supplier could materially and adversely affect us by increasing product costs or reducing or eliminating the availability of such parts or components. In such events, our inability to develop alternative sources of supply quickly and on a cost-effective basis could materially impair our ability to manufacture and deliver our products on a timely basis and could have a material adverse effect on our business, operating results and financial condition.

Dependence on Key Personnel

Our success will depend in large part upon our ability to attract and retain highly qualified management, engineering, manufacturing, marketing, sales and R&D personnel. Due to the specialized nature of our business, it may be difficult to locate and hire qualified personnel. The loss of services of one of our executive officers or other key personnel, or the failure to attract and retain other executive officers or key personnel, could have a material adverse effect on our business, operating results and financial condition.

Product Liability

To date, our products have been installed in over 300 cell sites with a wide geographic dispersion. Although our products have not experienced any significant reliability problems to date, our products may develop reliability problems in the future. Repeated or widespread quality problems could result in significant warranty expenses and/or the loss of customer confidence. The occurrence of such quality problems could have a material adverse effect on our business, operating results and financial condition.

Competition

The wireless telecommunications equipment market is very competitive. Our products compete directly with products which embody existing and future competing commercial technologies. Many of these companies have substantially greater financial resources, larger R&D staffs and greater manufacturing and marketing capabilities than we do. Other emerging wireless technologies, including "smart antennas" and tower mounted amplifiers, may also provide protection from RF interference and offer enhanced range to wireless communication service providers at lower prices and/or superior performance, and may therefore compete with our products. High performance RF filters

15

23

may not become a preferred technology to address the needs of wireless communication service providers. Failure of our products to improve performance sufficiently, reliably, or at an acceptable price or to achieve commercial acceptance or otherwise compete with conventional and new technologies will have a material adverse effect on the our business, operating results and financial condition.

Although the market for superconductive electronics currently is small and in the early stages of development, we believe it will become intensely

competitive, especially if products with significant market potential are successfully developed. In addition, if the superconducting industry develops, additional competitors with significantly greater resources are likely to enter the field. In order to compete successfully, we must continue to develop and maintain technologically advanced products, reduce production costs, attract and retain highly qualified personnel, obtain additional patent or other protection for our technology and products and manufacture and market our products, either alone or with third parties. We may be unable to achieve these objectives. Failure to achieve these objectives would have a material adverse effect on our business, operating results and financial condition.

In the past, we have had some success in increasing sales through pricing strategies pursuant to which we reduced the prices for all of our products. Such growth, however, was not consistently sustained. Similarly, we may not be able to continue to reduce product costs sufficiently to achieve and maintain acceptable profit margins.

LEGAL MATTERS

Intellectual Property and Patents

Our success will depend in part on our ability to obtain patent protection for our products and processes, to preserve our trade secrets and to operate without infringing upon the patent or other proprietary rights of others and without breaching or otherwise losing rights in the technology licenses upon which any of our products are based. As of December 31, 2000, we had been issued 35 U.S. and 4 foreign patents, had filed and were actively pursuing applications for 13 other U.S. and 23 other foreign patents, and were the licensee of 7 U.S. patents and patent applications held by others. We acquired additional patents, through assignment of a license from the Canadian government, in connection with our purchase of the Adaptive Notch Filtering business unit of Lockheed Martin Canada. One of our patents is jointly owned with Lucent Technologies, Inc. We believe that, since the discovery of HTS materials in 1986, a large number of patent applications have been filed worldwide, and many patents have been granted in the U.S. relating to HTS materials. The claims in those patents often appear to overlap and there are interference proceedings pending in the United States Patent and Trademark Office (not currently involving our company) regarding rights to inventions claimed in some of the HTS materials patent applications. We also believe there are a large number of patents and patent applications covering RF filter products and other products and technologies that we are pursuing. Accordingly, the patent positions of companies using HTS materials technologies and RF technologies, including our company, are uncertain and involve complex legal and factual questions. The patent applications filed by us or by our licensors may not result in issued patents or the scope and breadth of any claims allowed in any patents issued to us or our licensors may not exclude competitors or provide competitive advantages to us. In addition, patents issued to us, our subsidiaries or our licensors may not be held valid if subsequently challenged or others may claim rights in the patents and other proprietary technologies owned or licensed by us. Others may have developed or may in the future develop similar products or technologies without violating any of our proprietary rights. Furthermore, our loss of any license to technology that we now have or acquire in the future may have a material adverse effect on our business, operating results and financial condition.

Some of the patents and patent applications owned or licensed by us are subject to non-exclusive, royalty-free licenses held by various U.S. governmental units. These licenses permit these U.S. government units to select vendors other than us to produce products for the U.S. Government, which would otherwise infringe our patent rights that are subject to the royalty-free licenses. In addition, the U.S. Government has the right to require us to grant licenses (including exclusive licenses) under such patents and patent

applications or other inventions to third parties in certain instances.

Patent applications in the U.S. are currently maintained in secrecy until patents are issued. In foreign countries, this secrecy is maintained for a period of time after filing. Accordingly, publication of discoveries in the

16

24

scientific literature or of patents themselves or laying open of patent applications in foreign countries tends to lag behind actual discoveries and filing of related patent applications. Due to this factor and the large number of patents and patent applications related to HTS materials, RF technologies and other products and technologies that we are pursuing, comprehensive patent searches and analyses associated with HTS materials, RF technologies and other products and technologies that we are pursuing are often impractical or not cost-effective. As a result, our patent and literature searches cannot fully evaluate the patentability of the claims in our patent applications or whether materials or processes used by us for our planned products infringe or will infringe upon existing technologies described in U.S. patents or may infringe upon claims in patent applications made available in the future. Because of the volume of patents issued and patent applications filed relating to HTS materials, RF technologies and other products and technologies that we are pursuing, we believe there is a significant risk that current and potential competitors and other third-parties have filed or will file patent applications for, or have obtained or will obtain, patents or other proprietary rights relating to materials, products or processes used or proposed to be used by us. In any such case, to avoid infringement, we would have to either license such technologies or design around any such patents. We may be unable to obtain licenses to such technologies or, if obtainable, such licenses may not be available on terms acceptable to us or we may be unable to successfully design around these third-party patents.

Participation in litigation or patent office proceedings in the U.S. or other countries, which could result in substantial cost to and diversion of effort by our company, may be necessary to enforce patents issued or licensed to us, to defend our company against infringement claims made by others or to determine the ownership, scope or validity of the proprietary rights of our company and others. The parties to such litigation may be larger, better capitalized than us and better able to support the cost of litigation. An adverse outcome in any such proceedings could subject us to significant liabilities to third parties, require us to seek licenses from third parties and/or require us to cease using certain technologies, any of which could have a material adverse effect on our business, operating results and financial condition.

We believe that a number of patent applications, including applications filed by International Business Machines Corporation, Lucent Technologies, Inc., and other potential competitors of our company are pending that may cover the useful compositions and uses of certain HTS materials including yttrium barium copper oxide ("YBCO"), the principal HTS material used by us in our present and currently proposed products. Therefore, there is a substantial risk that one or more third parties may be granted patents covering YBCO and other HTS materials and their uses, in which case we could not use these materials without an appropriate license. As with other patents, we have no assurance that we will be able to obtain licenses to any such patents for YBCO or other HTS materials or their uses or that such licenses would be available on commercially reasonable terms. Any of these problems would have a material adverse effect on our business, operating results and financial condition.

Government Regulations

Although we believe that our wireless telecommunications products themselves would not be subject to licensing by, or approval requirements of, the FCC, the operation of base stations is subject to FCC licensing and the radio equipment into which our products would be incorporated is subject to FCC approval. Base stations and the equipment marketed for use therein must meet specified technical standards. Our ability to sell our wireless telecommunications products is dependent on the ability of wireless base station equipment manufacturers and wireless base station operators to obtain and retain the necessary FCC approvals and licenses. In order for them to be acceptable to base station equipment manufacturers and to base station operators, the characteristics, quality and reliability of our base station products must enable them to meet FCC technical standards. We may be subject to similar regulations of the Canadian federal and provincial governments. Any failure to meet such standards or delays by base station equipment manufacturers and wireless base station operators in obtaining the necessary approvals or licenses could have a material adverse effect on our business, operating results and financial condition. In addition, HTS RF filters are on the U.S. Department of Commerce's export regulation list. Therefore, exportation of such RF filters to certain countries may be restricted or subject to export licenses.

We are subject to governmental labor, safety and discrimination laws and regulations with substantial penalties for violations. In addition, employees and others may bring suit against us for perceived violations of such laws and regulations. Defense against such complaints could result in significant legal costs for us. Although we

17

25

endeavor to comply with all applicable laws and regulations, we may be the subject of complaints in the future, which could have a material adverse effect on our business, operating results and financial condition.

Environmental Liability

We use certain hazardous materials in our research, development and manufacturing operations. As a result, we are subject to stringent federal, state and local regulations governing the storage, use and disposal of such materials. It is possible that current or future laws and regulations could require us to make substantial expenditures for preventive or remedial action, reduction of chemical exposure, or waste treatment or disposal. We believe we are in material compliance with all environmental regulations and to date we have not had to incur significant expenditures for preventive or remedial action with respect to the use of hazardous materials. However, our operations, business or assets could be materially and adversely affected by the interpretation and enforcement of current or future environmental laws and regulations. In addition, although we believe that our safety procedures for handling and disposing of such materials comply with the standards prescribed by state and federal regulations, there is the risk of accidental contamination or injury from these materials. In the event of an accident, we could be held liable for any damages that result. Furthermore, the use and disposal of hazardous materials involves the risk that we could incur substantial expenditures for such preventive or remedial actions. The liability in the event of an accident or the costs of such actions could exceed the our resources or otherwise have a material adverse effect on our business, results of operations and financial condition. We carry property and workman's compensation insurances in full force and effect through nationally known carriers which include pollution cleanup or removal and medical claims for industrial incidents.

Litigation

We are party to several pending litigation matters, as described in our quarterly report on Form 10-Q for the third quarter 2000. If decided adversely, such litigation could have a material adverse effect on our business, results of operations and financial condition.

As further described in our filings with the SEC, we are also a nominal defendant in a lawsuit brought under Section 16(b) of the Securities Exchange Act of 1934, which seeks to recover for our benefit alleged "short-swing" profits realized by certain stockholders. The stockholder defendants have denied all liability and are vigorously defending this lawsuit. However, to the extent stockholders do not participate in this rights offering and their interests in our company are therefore diluted, their economic interest in any recovery for our benefit in this lawsuit would be correspondingly reduced.

RISKS RELATED TO ACQUISITIONS AND BUSINESS EXPANSION

Risks Associated with Lockheed Martin Canada Transaction

We acquired the Adaptive Notch Filtering business unit of Lockheed Martin Canada in December 2000. There are certain risks associated with this transaction, including the risk that we will not be able to successfully integrate the Adaptive Notch Filtering business into our existing business.

Risks Associated with Spectral Solutions Transaction

We acquired Spectral Solutions in August 2000. There are certain risks associated with this transaction, including the risk that we will not be able to successfully integrate the Spectral Solutions business. Spectral Solutions develops and manufactures primarily "thin-film" HTS RF applications for the wireless communications industry. We have concentrated our manufacturing and marketing efforts to date on "thick-film" applications, and there can be no assurance that we will successfully integrate thin-film technology into our product offerings. There is also no assurance that we will be able to achieve the synergies we believe should result from the acquisition of Spectral Solutions.

Risks of future acquisitions

In the future, we may pursue acquisitions to obtain products, services and technologies that we believe will complement or enhance our current product or services offerings. At present, we have no agreements or other

18

26

arrangements with respect to any acquisition. An acquisition may not produce the revenue, earnings or business synergies that we anticipated and may cause us to assume significant unforeseen liabilities, and an acquired product, service or technology might not perform as we expected. If we pursue any acquisition, our management could spend a significant amount of time and effort in identifying and completing the acquisition and may be distracted from the operations of our business. If we complete an acquisition, we would probably have to devote a significant amount of management resources to integrating the acquired business with our existing business, and that integration may not be successful.

To pay for an acquisition, we might use equity securities or cash, including proceeds of this offering. Alternatively, we might borrow money from a

bank or other lender. If we use equity securities, our stockholders will experience dilution of their ownership interests. If we use cash or debt financing, our financial liquidity will be reduced.

International Operations

We are in discussions with several companies in non-U.S. markets, in particular in Japan and other parts of Asia, to form joint ventures or other marketing and consulting arrangements in order to increase sales of our products in these markets. Results of these discussions include the Lockheed Martin Transaction and the opening of a Japanese office. We believe that non-U.S. markets could provide a substantial source of revenue in the future. However, there are certain risks applicable to doing business in foreign markets that are not applicable to companies doing business solely in the U.S. For example, we will be subject to risks related to fluctuations in the exchange rate between the U.S. dollar and foreign currencies in countries in which we do business. In addition, we will be subject to the additional laws and regulations of these foreign jurisdictions, some of which laws and regulations might be substantially more restrictive than similar U.S. ones. Foreign jurisdictions may also provide less patent protection than is available in the U.S., and we may be less able to protect our intellectual property from misappropriation and infringement in these foreign markets.

Risk Factors Related to this Rights Offering

There are risks related to this offering that could result in substantial losses for investors who exercise their rights. These risks include:

Stock Market Risks

- Decline in Our Stock Price. The subscription price in this rights offering may represent a discount to the market price of our common stock on the date it is determined. The trading price of our common stock may decline to below the subscription price. We cannot assure you that the subscription price will remain below any trading price for our common stock or that the trading price of our common stock will not decline to below the subscription price during or after this rights offering.
- Future Market Price of Our Stock. Future prices of our stock may be affected positively or negatively by our future revenues and earnings, changes in estimates by analysts and our ability to meet such estimates, speculation in the trade or business press about our company, and overall conditions affecting our businesses, economic trends and the securities markets.

Procedural Risks

- No Revocation. You are not allowed to revoke or change your exercise of rights after you send in your subscription forms and payment. If we cancel this rights offering, we are obligated only to refund payments actually received, without interest.
- Need to Act Promptly and Follow Subscription Instructions. Stockholders who desire to purchase shares in this rights offering must act promptly to ensure that all required forms and payments are actually received by

the subscription agent, LaSalle National Bank, prior to the expiration date. If you fail to complete and sign the required subscription forms, send an incorrect payment amount, or otherwise fail to follow the subscription procedures that apply to your desired transaction, LaSalle National Bank may, depending on the circumstances, reject your subscription or accept it to the extent of the payment received. Neither we nor LaSalle National Bank undertakes to contact you concerning, or attempt to correct, an incomplete or incorrect subscription form or payment. We have the sole discretion to determine whether a subscription exercise properly follows the subscription procedures.

- Risk of Personal Checks. Any personal check used to pay for shares must clear prior to the expiration date, and the clearing process may require five or more business days.

If you do not exercise your rights, your relative ownership interest in the Company will be diluted

If you choose not to exercise your subscription rights in full, your relative ownership interest in our company will be diluted. In addition, because the subscription price represents a discount from the prevailing market price of our common stock, stockholders who choose not to exercise their subscription rights could experience dilution of their economic interest in our company.

Participation in the Offering of Our Major Stockholders

Our principal stockholders, who hold approximately 65% of our outstanding stock, have indicated that they are supportive of this rights offering, subject to their agreement with the pricing. However, these stockholders are under no legal obligation to participate in this offering, and they could determine not to participate or to participate by exercising their basic subscription privilege only in part. If these stockholders do not participate or if they participate only partially, we will not raise the funds that we expect from this offering, and the funds that we raise may be insufficient to satisfy the cash needs that we have identified in this prospectus.

20

28

THE RIGHTS OFFERING

THE RIGHTS

As soon as practicable after the date of this prospectus, we are distributing, at no charge, to holders of our common stock as of 5:00 p.m. (New York City time) on the record date of _____, 2001, ____ subscription rights for every share of common stock owned at that time to purchase additional shares of common stock. Each whole right entitles you to purchase one share of our common stock for the subscription price. On January 4, 2001, the last reported sales price for our common stock on the over-the-counter market was \$2.19 per share.

We will not issue fractional rights. If the number of shares of common stock you held on the record date would have resulted in your receipt of fractional rights, the number of rights issued to you will be rounded down to the nearest whole right. As a result, our stockholders that hold of record fewer than _____ shares as of ______, 2001 may not be receiving rights.

SUBSCRIPTION PRICE

The subscription price for the basic subscription privilege is $\ _$ per share, and the subscription price for the oversubscription privilege is $\ _$ per share, payable in cash. All payments must be cleared on or before the expiration date.

BASIC AND OVERSUBSCRIPTION PRIVILEGES

Basic Subscription Privilege. You are entitled to purchase one share of common stock at the subscription price for every whole right exercised.

Oversubscription Privilege. If you exercise your basic subscription privilege in full, you may also subscribe for additional shares that other stockholders have not purchased under their basic subscription privilege. If there are not enough shares available to fill all such subscriptions for additional shares, the available shares will be allocated pro rata based on the number of shares each subscriber for additional shares has purchased under the basic subscription privilege. We will not allocate to you more than the number of shares you have actually subscribed and paid for.

You are not entitled to exercise the oversubscription privilege unless you elect to fully exercise your basic subscription privilege. For this purpose, you would only count the shares you own in your own name, and not other shares that might, for example, be jointly held with a spouse, held as a custodian for someone else, or held in an individual retirement account.

You can elect to exercise the oversubscription privilege only at the same time you exercise your basic subscription privilege in full.

In exercising the oversubscription privilege, you must pay the full subscription price for all the shares you are electing to purchase. If we do not allocate to you all of the shares you have subscribed for under the oversubscription privilege, we will refund by mail to you any payment you have made for shares which are not available to issue to you, as soon as practicable after completion of this rights offering. Interest will not be payable on amounts refunded.

Banks, brokers and other nominees who exercise the oversubscription privilege on behalf of beneficial owners of shares must report certain information to LaSalle National Bank and us and record certain other information received from each beneficial owner exercising rights. Generally, banks, brokers and other nominees must report (1) the number of shares held on the record date on behalf of each beneficial owner, (2) the number of rights as to which the basic subscription privilege has been exercised on behalf of each beneficial owner, (3) that each beneficial owner's basic subscription privilege held in the same capacity has been exercised in full, and (4) the number of shares subscribed for under the oversubscription privilege by each beneficial owner.

If you complete the portion of the subscription warrant to exercise the oversubscription privilege, you will be representing and certifying that you have fully exercised your basic subscription privilege as described above. You must exercise your oversubscription privilege at the same time you exercise your basic subscription privilege.

21

29

REASON FOR THIS RIGHTS OFFERING

We are conducting this offering after exploring various alternatives for raising funds to meet our capitalization needs. We have concluded that other

alternatives would likely not be successful in raising the desired funds on a timely enough basis. Additionally, we chose to do this rights offering over other financing alternatives in order to provide our stockholders with an opportunity to participate in the issue of shares of common stock on a pro rata basis. We will use the net proceeds of this offering for general corporate purposes.

NO BOARD INVESTMENT RECOMMENDATION TO STOCKHOLDERS

Our Board of Directors does not make any recommendation to you about whether you should exercise any rights. In making the decision to exercise or not exercise your rights, you must consider your own best interests.

If you choose not to exercise your subscription rights in full, your relative ownership interest of our company will be diluted. If you exercise rights, you risk investment loss on new money invested. The trading price of our common stock may decline below the subscription price. We cannot assure you that the subscription price will remain below any trading price for our common stock or that its trading price will not decline to below the subscription price during or after this rights offering. For a summary of some of the risks a new investment would entail, see "Risk Factors" beginning on page ___ .

EXPIRATION TIME AND DATE

The rights may be exercised beginning as of the date of this prospectus expire on _____, 2001, at 5:00 p.m., New York City time. We have the option of extending the expiration date for any reason, although presently we do not intend to do so. Rights not exercised by the expiration date will be null and void.

In order to exercise rights in a timely manner, you must assure that LaSalle National Bank actually receives, prior to expiration of the rights, the properly executed and completed subscription warrant (or "Form of Notice of Guaranteed Delivery"), together with full payment for all shares you wish to purchase.

NO REVOCATION

You are not allowed to revoke or change your exercise of rights after you send in your subscription forms and payment.

TRANSFERABILITY OF RIGHTS

The rights are not transferable and may be exercised only by the persons to whom they are issued.

EXTENSION, WITHDRAWAL AND AMENDMENT

We have the option of extending the period for exercising your rights, although we presently do not intend to do so.

We also reserve the right to withdraw or terminate this rights offering at any time for any reason. In the event that this offering is withdrawn or terminated, all funds received from subscriptions by rights holders will be returned. Interest will not be payable on any returned funds.

We reserve the right to amend the terms of this rights offering. If we make an amendment that we consider significant, we will (1) mail notice of the amendment to all stockholders of record as of the record date, (2) extend the expiration date by at least ten days and (3) offer all subscribers no less than ten days to revoke any subscription already submitted. The extension of the expiration date will not, in and of itself, be treated as a significant

amendment for these purposes.

22

30

EXERCISE ONLY BY RECORD HOLDERS

We are sending a subscription warrant to each record holder along with this prospectus and related instructions to evidence the rights. In order to exercise rights, you must fill out and sign the subscription warrant and timely deliver it with full payment for the shares to be purchased. Only the holders of record of our common stock as of the close of business as of the record date may exercise rights. You are a record holder for this purpose only if your name is registered as a stockholder with our transfer agent, LaSalle National Bank, as of the record date.

A depository bank, trust company or securities broker or dealer which is a record holder for more than one beneficial owner of shares may divide or consolidate subscription warrants to represent shares held as of the record date by their beneficial owners, upon proper showing to LaSalle National Bank.

If you own shares held in a brokerage, bank or other custodial or nominee account, in order to exercise your rights you must promptly send the proper instruction form to the person holding your shares. Your broker, dealer, depository or custodian bank or other person holding your shares is the record holder of your shares and will have to act on your behalf in order for you to exercise your rights. We have asked your broker, dealer or other nominee holders of our stock to contact the beneficial owners to obtain instructions concerning rights the beneficial owners it represents are entitled to exercise.

FOREIGN AND UNKNOWN ADDRESSES

We are not mailing subscription warrants to stockholders whose addresses are outside the United States or who have an APO or FPO address. In those cases, the subscription warrants will be held by LaSalle National Bank for those stockholders. To exercise their rights, these stockholders must notify LaSalle National Bank prior to 11:00 a.m., New York City time, on the third business day prior to the expiration date.

RIGHT TO BLOCK EXERCISE DUE TO REGULATORY ISSUES

We reserve the right to refuse the exercise of rights by any holder of rights who would, in our opinion, be required to obtain prior clearance or approval from any state, federal or foreign regulatory authorities for the exercise of rights or ownership of additional shares if, at the expiration date, this clearance or approval has not been obtained. We are not undertaking to pay any expenses incurred in seeking such clearance or approval.

We are not offering or selling, or soliciting any purchase of, shares in any state or other jurisdiction in which this rights offering is not permitted. We reserve the right to delay the commencement of this rights offering in certain states or other jurisdictions if necessary to comply with local laws. However, we may elect not to offer rights to residents of any state or other jurisdiction whose law would require a change in this rights offering in order to carry out this rights offering in such state or jurisdiction.

PROCEDURES TO EXERCISE RIGHTS

Please do not send subscription warrants or related forms to us. Please send the properly completed and executed form of subscription warrant with full

payment to LaSalle National Bank, the subscription agent for this rights offering.

You should read carefully the subscription warrant and related instructions and forms which accompany this prospectus. You should call Mackenzie Partners, the information agent for this rights offering, at the address and telephone number listed below under the caption "The Rights Offering--Questions and Assistance Concerning the Rights" promptly with any questions you may have.

You may exercise your rights by delivering to LaSalle National Bank at the address specified below and in the instructions accompanying this prospectus, on or prior to the expiration date:

 Properly completed and executed subscription warrant(s) which evidence your rights. See "The Rights Offering--Delivery of Subscription Warrant" below for instructions on where to send these.

23

31

- Payment in full of the subscription price for each share of our common stock you wish to purchase under the basic subscription privilege and the oversubscription privilege. See "The Rights Offering--Required Forms of Payment of Subscription Price" below for payment instructions.

REQUIRED FORMS OF PAYMENT OF SUBSCRIPTION PRICE

The subscription price for the basic subscription privilege is \$ ___ per share subscribed for, and the subscription price for the oversubscription privilege is \$ ___ per share, payable in cash. All payments must be CLEARED on or before the expiration date.

If you exercise any rights, you must deliver to LaSalle National Bank full payment in the form of:

- a personal check, certified or cashier's check or bank draft drawn upon a U.S. bank, or a U.S. postal money order, payable to "LaSalle National Bank, as Subscription Agent"; or
- a wire transfer of immediately available funds to the account maintained by the LaSalle National Bank for this rights offering. If you desire to make payment by wire transfer, you must contact LaSalle National Bank, at _______ to receive a Wire Authorization Form.

In order for you to timely exercise your rights, LaSalle National Bank must actually receive the subscription price before the expiration date.

Funds paid by uncertified personal check may take at least five business days to clear. Accordingly, if you pay the subscription price by means of uncertified personal check, you should make payment sufficiently in advance of the expiration date to ensure that your check actually clears and the payment is received before such date. We are not responsible for any delay in payment by you and suggest that you consider payment by means of certified or cashier's check, money order or wire transfer of funds.

DELIVERY OF SUBSCRIPTION WARRANT AND OTHER DOCUMENTS

All subscription warrants, payments of the subscription price, nominee holder certifications, notices of guaranteed delivery and DTC participant oversubscription exercise forms, to the extent applicable to your exercise of rights, must be delivered to LaSalle National Bank as follows:

By Hand:	By First Class Mail:	By Overnight

Eligible institutions may deliver "Notice of Guaranteed Delivery" forms by facsimile transmission. LaSalle National Bank's facsimile number is
_______. You should confirm receipt of all facsimiles by calling

SPECIAL PROCEDURE UNDER "NOTICE OF GUARANTEED DELIVERY" FORM

If you wish to exercise rights but cannot ensure that LaSalle National Bank will actually receive the executed subscription warrant before the expiration date, you may alternatively exercise rights by causing all of the following to occur within the time prescribed:

- Full payment must be received by LaSalle National Bank prior to the expiration date for all of the shares of our common stock you desire to purchase pursuant to the basic subscription privilege and the oversubscription privilege.
- A properly executed "Notice of Guaranteed Delivery" substantially in the form distributed by us with your subscription warrant and accompanied by a Medallion Guaranty must be received by LaSalle National Bank at or prior to the expiration date.

24

32

- The "Notice of Guaranteed Delivery" form must be executed by both you and one of the following: (1) a member firm of a registered national securities exchange, (2) a member of the National Association of Securities Dealers, Inc. (NASD), (3) a commercial bank or trust company having an office or correspondent in the United States, or (4) other eligible guarantor institution qualified under a guarantee program acceptable to LaSalle National Bank. The co-signing institution must provide a Medallion Guaranty on the Notice of Guaranteed Delivery guaranteeing that the subscription warrant will be delivered to LaSalle National Bank within three business days after the date of the form. Your Notice of Guaranteed Delivery form must also provide other relevant details concerning the intended exercise of your rights.
- The properly completed subscription warrant(s) with any required signature guarantee must be received by LaSalle National Bank within three business days following the date of the related Notice of Guaranteed Delivery.
- If you are a nominee holder of rights, the "Nominee Holder Certification" must also accompany the Notice of Guaranteed Delivery.

A Notice of Guaranteed Delivery may be delivered to LaSalle National

Bank in the same manner as subscription warrants at the addresses set forth above under the caption "The Rights Offering--Delivery of Subscription Warrant" or by telegram or facsimile transmission.

Additional copies of the form of Notice of Guaranteed Delivery are available upon request from Mackenzie Partners, whose address and telephone number are set forth below under the caption "Questions and Assistance Concerning the Rights."

INCOMPLETE FORMS; INSUFFICIENT PAYMENT

If you do not indicate on your subscription warrant the number of rights being exercised, or do not forward sufficient payment for the number of rights that you indicate are being exercised, then we will accept the subscription forms and payment only for the maximum number of rights that may be exercised based on the actual payment delivered. We will make this determination as follows: (1) you will be deemed to have exercised your basic subscription privilege to the full extent of the payment received, and (2) if any funds remain, you will be deemed to have exercised your oversubscription privilege to the extent of the remaining funds. We will return any payment not applied to the purchase of shares under this rights offering as soon as practicable by mail. Interest will not be payable on amounts refunded.

PROHIBITION ON FRACTIONAL SHARES

Each whole right entitles you to purchase one share of common stock at the subscription price per share. We will accept any inadvertent subscription indicating a purchase of fractional shares by rounding down to the nearest whole share and, as soon as practicable, refunding without interest any payment received for a fractional share.

INSTRUCTIONS TO NOMINEE HOLDERS

If you are a broker, trustee or depository for securities or other nominee holder for beneficial owners of our common stock, we are requesting that you contact such beneficial owners as soon as possible to obtain instructions and related certifications concerning their rights. Our request to you is further explained in the suggested form of letter of instructions from nominee holders to beneficial owners accompanying this prospectus.

To the extent so instructed, nominee holders should complete appropriate subscription warrants on behalf of beneficial owners and, in the case of any exercise of the oversubscription privilege, the related form of "Nominee Holder Certification," and submit them on a timely basis to LaSalle National Bank with the proper payment.

25

33

RISK OF LOSS ON DELIVERY OF SUBSCRIPTION WARRANT FORMS AND PAYMENTS

 $\,$ Each holder of rights bears all risk of the method of delivery to LaSalle National Bank of subscription warrants and payments of the subscription price.

If subscription warrants and payments are sent by mail, you are urged to send these by registered mail, properly insured, with return receipt requested, and to allow a sufficient number of days to ensure delivery to LaSalle National Bank and clearance of payment prior to the expiration date.

Because uncertified personal checks may take at least five business days to clear, you are strongly urged to pay, or arrange for payment, by means of certified or cashier's check, money order or wire transfer of funds.

PROCEDURES FOR DTC PARTICIPANTS

If you are a DTC participant, we expect that your exercise of your basic subscription privilege (but not your oversubscription privilege) may be made through the facilities of The Depository Trust Company (commonly known as DTC). If your rights are exercised as part of the basic subscription privilege through DTC, we refer to them as "DTC Exercised Rights." If you hold DTC Exercised Rights, you may exercise your oversubscription privilege by properly executing and delivering to LaSalle National Bank, at or prior to the time the rights expire, a DTC participant oversubscription exercise form and a nominee holder certification and making payment of the appropriate subscription price for the number of shares of common stock for which your oversubscription privilege is to be exercised. Please call Mackenzie Partners at (800) 322-2885 (toll free) to obtain copies of the DTC oversubscription privilege form and the nominee holder certification.

HOW PROCEDURAL AND OTHER QUESTIONS ARE RESOLVED

We are entitled to resolve all questions concerning the timeliness, validity, form and eligibility of any exercise of rights. Our determination of such questions will be final and binding. We, in our sole discretion, may waive any defect or irregularity, or permit a defect or irregularity to be corrected within such time as we may determine, or reject the purported exercise of any right because of any defect or irregularity.

Subscription warrants will not be considered received or accepted until all irregularities have been waived or cured within such time as we determine in our sole discretion. Neither we nor LaSalle National Bank have any duty to give notification of any defect or irregularity in connection with the submission of subscription warrants or any other required document. Neither we nor LaSalle National Bank will incur any liability for failure to give such notification.

We reserve the right to reject any exercise of rights if the exercise does not comply with the terms of this rights offering or is not in proper form or if the exercise of rights would be unlawful or materially burdensome.

ISSUANCE OF STOCK CERTIFICATES

Stock certificates for shares purchased in this rights offering will be issued as soon as practicable after the expiration date. LaSalle National Bank will deliver subscription payments to us only after consummation of this rights offering and the issuance of stock certificates to our stockholders that exercised rights. Unless you instruct otherwise in your subscription warrant form, shares purchased by the exercise of rights will be registered in the name of the person exercising the rights.

QUESTIONS AND ASSISTANCE CONCERNING THE RIGHTS

You should direct any questions, requests for assistance concerning the rights or requests for additional copies of this prospectus, forms of instructions or the Notice of Guaranteed Delivery to:

Mackenzie Partners,	Inc.
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26

34

USE OF PROCEEDS

We estimate that the net proceeds of this offering will be approximately _____. We will use these proceeds for general corporate purposes.

DETERMINATION OF SUBSCRIPTION PRICE

Our board of directors determined the offering price of the basic subscription privilege and the oversubscription privilege after considering a variety of factors, including:

- our need for capital in the near term;
- the likely cost of capital available from alternative sources, assuming that such capital could be raised on a timely basis;
- the price at which our principal stockholders would be willing to participate in the rights offering;
- the fact that all of our stockholders would have the opportunity to participate in this offering on a pro-rata basis;
- historic and current trading prices for our common stock;
- recent prices at which we have issued our common stock; and
- general economic, business and market conditions.

The prices may be set at a discount to the actual trading price of our common stock as of the date the price is set. This discount will be offered as an incentive for our current stockholders to participate in this offering. The offering prices do not necessarily bear any relationship to the book value of our assets, past operations, cash flow, earnings, financial condition or any other established criteria for value and should not be considered an indication of our underlying value. In setting the offering prices our board did not seek or obtain any valuation opinion from outside investment bankers or financial advisors.

27

35

PRICE RANGE OF COMMON STOCK AND DIVIDEND POLICY

Our common stock is traded on the over-the-counter bulletin board under the symbol "ISCO.OB." On January 4, 2001, there were 309 record holders of the common stock and the closing price of our common stock on the over-the-counter market was \$2.19. The following table sets forth the high and low closing prices of our common stock on the over-the-counter market for the periods indicated.

High Low

Year Ended December 31, 1998

First Quarter. \$ 3.313 Second Quarter. \$ 3.250 Third Quarter. \$ 1.938 Fourth Quarter. \$ 1.656	\$ 0.875 \$ 1.250 \$ 1.000 \$ 0.844
Year Ended December 31, 1999	
First Quarter \$ 1.531	\$ 0.938
Second Quarter \$ 1.219	\$ 0.531
Third Quarter \$ 1.063	\$ 0.531
Fourth Quarter \$ 1.969	\$ 0.350
Year Ended December 31, 2000	
First Quarter \$29.375	\$ 1.219
Second Quarter \$ 7.750	\$ 2.813
Third Quarter \$ 4.938	\$ 2.781
Fourth Quarter \$ 3.813	\$ 0.812

We have never paid cash dividends on our common stock and we do not expect to pay any dividends on our common stock in the foreseeable future. We intend to retain earnings for use in the operation and expansion of our business.

28

36

DESCRIPTION OF SECURITIES

GENERAL

Our authorized capital stock consists of 250,000,000 shares of common stock and 300,000 shares of preferred stock. As of January 1, 2001, there were 107,719,307 shares of our common stock and no shares of our preferred stock outstanding.

COMMON STOCK

Holders of our common stock are entitled to one vote per share on all matters submitted to a vote of stockholders.

Subject to the rights of holders of any outstanding shares of our preferred stock, the holders of outstanding shares of our common stock will be entitled to the dividends and other distributions as may be declared from time to time by our Board of Directors from legally available funds. Holders of our common stock do not have preemptive, subscription, redemption or conversion rights. Subject to the rights of holders of any shares of our outstanding preferred stock, upon our liquidation, dissolution or winding up and after payment of all prior claims, the holders of shares of our common stock outstanding at that time will be entitled to receive pro rata all of our assets. All shares of our common stock currently outstanding are, and all shares of our common stock offered in this offering will be, fully paid and nonassessable.

PREFERRED STOCK

Our Board of Directors, without further stockholder approval, may issue our preferred stock in one or more series from time to time and fix or alter the designations, relative rights, priorities, preferences, qualifications, limitations and restrictions of the shares of each series. The rights, preferences, limitations and restrictions of different series of our preferred stock may differ with respect to dividend rates, amounts payable on liquidation,

voting rights, conversion rights, redemption provisions, sinking fund provisions and other matters. Our Board of Directors may authorize the issuance of our preferred stock which ranks senior to our common stock for the payment of dividends and the distribution of assets on liquidation. In addition, our Board of Directors can fix limitations and restrictions, if any, upon the payment of dividends on our common stock to be effective while any shares of our preferred stock are outstanding. Our Board of Directors, without stockholder approval, can also issue our preferred stock with voting and conversion rights which could adversely affect the voting power of the holders of common stock. Our issuance of our preferred stock may delay, defer or prevent a change in our control. We have no present intention to issue shares of our preferred stock.

We have designated 10,000 shares of our preferred stock as series A junior participating preferred stock in connection with our stockholder rights agreement. As of the date of this prospectus, we have not issued any shares of our series A preferred stock. Please read "Item 5. Market for Registrant's Common Equity and Related Stockholder Matters -- Rights Plan" in our Annual Report on Form 10-K incorporated by reference, to this prospectus for a description of our stockholder rights agreement and the series A preferred stock.

29

37

CERTAIN UNITED STATES FEDERAL INCOME TAX CONSEQUENCES

The following is a summary of the material United States federal income tax consequences of this offering to the holders of our common stock upon the distribution of rights and to the holders of the rights upon their exercise. This summary is based on provisions of the Internal Revenue Code of 1986, as amended (the "Code"), existing and proposed Treasury regulations promulgated thereunder and administrative and judicial interpretations thereof, all as of the date hereof and all of which are subject to change, possibly on a retroactive basis.

This summary is limited to our stockholders who have held our common stock, and will hold the rights and any shares acquired upon the exercise of rights, as "capital assets" within the meaning of section 1221 of the Code. This summary does not address all of the tax consequences that may be relevant to particular holders in light of their personal circumstances, or to holders who are subject to special rules (such as banks and other financial institutions, broker-dealers, real estate investment trusts, regulated investment companies, insurance companies, tax-exempt organizations and non-U.S. individuals or entities). In addition, this summary does not include any description of the tax laws of any state, local or non-U.S. government that may be applicable to a particular holder.

HOLDERS ARE URGED TO CONSULT THEIR OWN TAX ADVISORS WITH RESPECT TO THE PARTICULAR U.S. FEDERAL INCOME AND ESTATE TAX CONSEQUENCES TO THEM OF THIS OFFERING, AS WELL AS THE TAX CONSEQUENCES UNDER STATE, LOCAL, NON-U.S. AND OTHER TAX LAWS AND THE POSSIBLE EFFECTS OF CHANGES IN TAX LAWS.

- DISTRIBUTION OF RIGHTS. A holder of our common stock will not recognize taxable income upon distribution of the rights.
- LAPSE OF THE RIGHTS. A holder of the rights that allows the rights to lapse will not recognize any gain or loss upon such lapse, and no adjustment will be made to the basis of the common stock with respect to which the rights are distributed.

- STOCKHOLDER TAX BASIS OF THE RIGHTS. Except as provided in the following sentence, the tax basis of the rights received by a holder of our common stock will be zero. If, however, either: (i) the fair market value of the rights on the date the rights are distributed is 15% or more of the fair market value (on the date of distribution) of the shares of common stock with respect to which the rights are distributed or (ii) the holder properly elects, in the holder's U.S. federal income tax return for the taxable year in which the holder receives the rights, to allocate part of the tax basis of such common stock to the rights, then, upon the exercise of the rights, the holder's tax basis in such common stock will be allocated between such common stock and the rights in proportion to the fair market values of each on the date of distribution.
- EXERCISE OF THE RIGHTS; BASIS AND HOLDING PERIOD OF THE COMMON STOCK. Holders of the rights will not recognize any gain or loss upon the exercise of the rights. The tax basis of the shares of our common stock acquired through the exercise of the rights will be equal to the sum of the subscription price for the rights and the holder's tax basis in the rights, if any. The holding period for the shares acquired through the exercise of the rights will begin on the date that the rights are exercised.
- SALE OF COMMON STOCK. The sale of common stock acquired through the exercise of the rights will result in the recognition of capital gain or loss to the holder in an amount equal to the difference between the amount realized and the holder's tax basis in the common stock sold. The gain or loss will be long-term capital gain or loss if the common stock is held for more than one year.
- INFORMATION REPORTING AND BACKUP WITHHOLDING. Information reporting may apply to a holder that is not a corporation (or other exempt recipient) to any dividend payments on common stock received upon the exercise of the rights and to payments on the proceeds of a sale of the common stock. A 31% backup withholding tax may apply to these payments unless the holder provides a correct taxpayer identification number and otherwise complies with the backup withholding requirements.

30

38

PLAN OF DISTRIBUTION

We are offering shares of our common stock directly to you pursuant to this rights offering. We have not employed any brokers, dealers or underwriters in connection with the solicitation or exercise of subscription privileges in this rights offering and no commissions, fees or discounts will be paid in connection with it. Certain of our officers and other employees may solicit responses from you, but such officers and other employees will not receive any commissions or compensation for such services other than their normal employment compensation.

We will pay the fees and expenses of LaSalle National Bank, as subscription agent, and Mackenzie Partners, as information agent, and also have agreed to indemnify the subscription agent and the information agent from any liability they may incur in connection with this rights offering.

On or about _____, 2001, we will distribute the rights and copies of this prospectus to the holder of record of our common stock on the record date. If you wish to exercise your rights and subscribe for shares of our common stock, you should follow the procedures described under "The Rights Offering--Procedures to Exercise Rights." The subscription rights are non-transferable.

Shares of our common stock received through the exercise of subscription rights will be traded on the over-the-counter market under the symbol "ISCO.OB" as our currently outstanding shares of common stock now trade.

LEGAL MATTERS

Sonnenschein Nath & Rosenthal will deliver an opinion to us about the validity of the issuance of our shares of common stock.

EXPERTS

Ernst & Young LLP, independent auditors, have audited (i) our financial statements and schedule included in our Annual Report on Form 10-K for the year ended December 31, 1999, as set forth in their report (which contains an explanatory paragraph describing conditions that raise substantial doubt about our company's ability to continue as a going concern as described in Note 3 to the financial statements), which is incorporated by reference in this prospectus. Our financial statements and schedule are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

31

39

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth the estimated expenses in connection with the issuance and distribution of the securities offered hereby.

SEC Registration Fee	\$5,000
Subscription Agent Fee	
Information Agent Fee	
Printing and Engraving Costs	
Legal Fees and Expenses	
Accounting Fees and Expenses	
Miscellaneous	
Total	\$
	======

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Article 9 of our Certificate of Incorporation provides that we shall indemnify our directors to the full extent permitted by the General Corporation

Law of the State of Delaware and may indemnify our officers and employees to such extent, except that we shall not be obligated to indemnify any such person (1) with respect to proceedings, claims or actions initiated or brought voluntarily by any such person and not by way of defense, or (2) for any amounts paid in settlement of an action indemnified against by us without our prior written consent. We have entered into indemnity agreements with each of our directors and officers. These agreements may require us, among other things, to indemnify such directors and officers against certain liabilities that may arise by reason of their status or service as directors or officers, as the case may be, to advance expenses to them as they are incurred, provided that they undertake to repay the amount advanced if it is ultimately determined by a court that they are not entitled to indemnification and to obtain directors' and officers' liability insurance if available on reasonable terms.

In addition, Article 8 of our Certificate of Incorporation provides that a director of ours shall not be personally liable to us or our stockholders for monetary damages for breach of his or her fiduciary duty as a director, except for liability (1) for any breach of the director's duty of loyalty to us or our stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) for willful or negligent conduct in paying dividends or repurchasing stock out of other than lawfully available funds or (iv) for any transaction from which the director derives an improper personal benefit.

Reference is made to Section 145 of the General Corporation Law of the State of Delaware which provides for indemnification of directors and officers in certain circumstances.

We have obtained a directors' and officers' liability insurance policy which entitles us to be reimbursed for certain indemnity payments we are required or permitted to make to our directors and officers.

40

Item 16. List of Exhibits

- 4.1 Form of Subscription Warrant to Subscribe for Shares of the Company's common stock.*
- 4.2 Certificate of Incorporation of the Company, incorporated by reference to Exhibit 3.1 to the Company's Registration Statement on Form S-3/A, filed with the Securities and Exchange Commission on August 13, 1998, Registration No. 333-56601.
- 4.3 By-Laws of the Company, incorporated by reference to Exhibit 3.2 to Amendment No. 3 to the Company's Registration Statement on Form S-1, filed with the SEC on October 26, 1993, Registration No. 33-67756.
- 4.4 Certificate of Amendment of Certificate of Incorporation of the Company, incorporated by reference to Exhibit 3.3 to Amendment No. 3 to the Company's Registration Statement on Form S-1, filed with the SEC on October 26, 1993, Registration No. 33-67756.
- 4.5 Certificate of Amendment of Certificate of Incorporation of the Company, incorporated by reference to Exhibit 4.3 to the Company's Registration Statement on Form S-3/A, filed with the SEC on July 1, 1999, Registration No. 333-77337.
- 4.6 Certificate of Amendment of Certificate of Incorporation of the Company filed July 18, 2000, incorporated by reference to the Company's registration statement on Form S-8, filed with the SEC on August 7, 2000.
- 4.7 Rights Agreement dated as of February 9, 1996 between the Company and LaSalle National Trust, N.A., incorporated by reference to the Exhibit to the Company's Registration Statement on Form 8-A, filed with the SEC on

February 12, 1996.

- 5.1 Opinion of Sonnenschein Nath & Rosenthal, outside counsel to the Company, as to the legality of the securities being registered (including consent).*
- 23.1 Consent of Ernst & Young LLP, independent accountants.*
- 23.2 Consent of Sonnenschein Nath & Rosenthal, included in Exhibit 5.1 hereto.*
- 24.1 Powers of Attorney.
- 99.1 Form of Subscription Agent Agreement between the Company and LaSalle National Bank.*
- 99.2 Form of Information Agent Agreement between the Company and Mackenzie Partners, Inc. *
- 99.3 Form of Instructions as to Use of Subscription Warrant.*
- 99.4 Form of Notice of Guaranteed Delivery.*
- 99.5 Form of Letter to Stockholders of Record.*
- 99.6 Form of Letter from Brokers or Other Nominees to Beneficial Owners of common stock.*
- 99.7 Form of Instructions by Beneficial Owners to Brokers or Other Nominees.*
- 99.8 Form of Letter to Dealers and Other Nominees.*

* To be filed by amendment.

ITEM 17. UNDERTAKINGS

The undersigned registrant hereby undertakes:

- (a) that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) 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;
- (b) to supplement the prospectus and, after the expiration of the offering period, to set forth the results of the subscription offer;

II-2

41

(c) insofar as indemnification for liabilities arising under the Securities Act of 1933 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 of 1933 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 Securities Act of 1933 and will be governed by the final adjudication of such issue;

- (d) for purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective; and
- (e) for the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus 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.

II-3

42

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Company certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Mt. Prospect, State of Illinois on the 5th day of January, 2001.

ILLINOIS SUPERCONDUCTOR CORPORATION

By: /s/ GEORGE M. CALHOUN

Name: George M. Calhoun

Title: Chairman and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each of the undersigned does hereby make, constitute and appoint George M. Calhoun his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign this registration statement of the Company on Form S-3 (including all pre-effective and post-effective amendments thereto and all registration statements filed pursuant to Rule 426(b) which incorporate this registration statement by reference), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission pursuant to the Securities Act of 1933, as amended, giving and granting unto said attorney-in-fact and agents full power and authority to do and perform each and every act and thing whatsoever necessary or appropriate to be done in and about the premises, as fully to all intents as he or she might or could do if personally present at the doing thereof, with full power of substitution and resubstitution, hereby ratifying and confirming all that his or her said attorney-in-fact and agents or substitutes may or shall 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.

SIGNATURE	TITLE	DATE
/s/ GEORGE M. CALHOUN	Chairman and Chief Executive Officer (Principal Executive Officer and Director)	January 5, 2001
George M. Calhoun		
/s/ CHARLES F. WILLES	Chief Financial Officer (Principal Financial and Accounting Officer)	January 5, 2001
Charles F. Willes		
/s/ MARK D. BRODSKY	Director	January 5, 2001
Mark D. Brodsky		
/s/ HOWARD S. HOFFMANN	Director	January 5, 2001
Howard S. Hoffmann		
/s/ SAMUEL A. PERLMAN	Director	January 5, 2001
Samuel A. Perlman		
/s/ THOMAS L. POWERS	Director	January 5, 2001
Thomas L. Powers		
/s/ RICHARD N. HERRING	Director	January 5, 2001
Richard N. Herring		
/s/ DANIEL T. SPOOR	Director	January 5, 2001
Daniel T. Spoor		