FORM SC 13D/A

Schedule filed to report acquisition of beneficial ownership of 5% or more of a class of equity securities [amend]

Filing Date: **2001-03-12**
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(HTML Version on secdatabase.com)

SUBJECT COMPANY

TANGRAM ENTERPRISE SOLUTIONS INC

CIK:**804121**| IRS No.: **232214726** | State of Incorp.:**PA** | Fiscal Year End: **1231**
Type: **SC 13D/A** | Act: **34** | File No.: **005-38569** | Film No.: **1565992**
SIC: **7372** Prepackaged software

Mailing Address
11000 REGENCY PKWY
STE 401
CARY NC 27511

Business Address
11000 REGENCY PARKWAY,
SUITE 401
GREAT VALLEY CORPORATE CTR
CARY NC 27511
9196536000

FILED BY

SAFEGUARD SCIENTIFICS INC ET AL

CIK:**86115**| IRS No.: **231609753** | State of Incorp.:**PA** | Fiscal Year End: **1231**
Type: **SC 13D/A**
SIC: **7389** Business services, nec

Business Address
435 DEVON PARK DR
800 THE SAFEGUARD BLDG
WAYNE PA 19087
6102930600

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D
(Rule 13d-101)

INFORMATION TO BE INCLUDED ON STATEMENTS FILED PURSUANT TO RULE 13d-1(A)
AND AMENDMENTS THERETO FILED PURSUANT TO RULE 13d-2(A)
Amendment No. 9

Tangram Enterprise Solutions, Inc.
(Name of Issuer)

Common Stock, par value $.01 per share
(Title of Class of Securities)

875924 10 2
(CUSIP Number)

N. Jeffrey Klauder, Esq.
Safeguard Scientifics, Inc.
435 Devon Park Drive, Building 800
Wayne, PA 19087
(610) 975-4984

With copies to:

Barry M. Abelson, Esq.
Pepper Hamilton LLP
3000 Logan Square
Philadelphia, PA 19103
(215) 981-4282
(Name, Address and Telephone Number of Person Authorized to
Receive Notices and Communications)

February 20, 2001
(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this

schedule because of Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box __.

NOTE: Schedules filed in paper format shall include a signed original and give copies of the schedule, including all exhibits. See Rule 13d-7(b) for other parties to whom copies are to be sent.

(Continued on following pages)

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SCHEDULE 13D

CUSIP NO. 875924 10 2		PAGE ____	OF ____ PAGES

1	NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON SAFEGUARD SCIENTIFICS, INC.		23-1609753
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP	(a) (b)	|X| |_|
3	SEC USE ONLY		
4	SOURCE OF FUNDS OO		
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e)		|_|
6	CITIZENSHIP OR PLACE OF ORGANIZATION PENNSYLVANIA		

NUMBER OF SHARES BENEFICIALLY OWNED BY	7	SOLE VOTING POWER	-0-
	8	SHARED VOTING POWER	

EACH REPORTING PERSON WITH		12,316,604 SHARES OF COMMON STOCK (ASSUMING CONVERSION OF SERIES F CONVERTIBLE PREFERRED STOCK)
	9	SOLE DISPOSITIVE POWER -0-
	10	SHARED DISPOSITIVE POWER 12,316,604 SHARES OF COMMON STOCK (ASSUMING CONVERSION OF SERIES F CONVERTIBLE PREFERRED STOCK)

11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 12,316,604 SHARES OF COMMON STOCK (ASSUMING CONVERSION OF SERIES F CONVERTIBLE PREFERRED STOCK)
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES |X|*
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 68.79%
14E	TYPE OF REPORTING PERSON CO

* Excludes an aggregate of 46,538 shares of common stock held by certain executive officers and directors of Safeguard Scientifics, Inc. and a trust for which one of them is a trustee. Safeguard disclaims beneficial ownership of such shares.

CUSIP NO. 875924 10 2 PAGE _____ OF _____ PAGES

1	NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON	
	SAFEGUARD DELAWARE, INC.	52-2081181

2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP	(a) (b)	|X| |_|
3	SEC USE ONLY		
4	SOURCE OF FUNDS OO		
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e)		|_|
6	CITIZENSHIP OR PLACE OF ORGANIZATION DELAWARE		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER -0-	
	8	SHARED VOTING POWER 1,500,000 SHARES OF COMMON STOCK (ASSUMING CONVERSION OF SERIES F CONVERTIBLE PREFERRED STOCK)	
	9	SOLE DISPOSITIVE POWER -0-	
	10	SHARED DISPOSITIVE POWER 1,500,000 SHARES OF COMMON STOCK (ASSUMING CONVERSION OF SERIES F CONVERTIBLE PREFERRED STOCK)	
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,500,000 SHARES OF COMMON STOCK (ASSUMING CONVERSION OF SERIES F CONVERTIBLE PREFERRED STOCK)		
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES		|_|
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 8.38%		
14E	TYPE OF REPORTING PERSON CO		

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CUSIP NO. 875924 10 2		PAGE ____ OF ____ PAGES
1	NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON SAFEGUARD SCIENTIFICS (DELAWARE), INC.	51-0291171
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP	(a) |X| (b) |_|
3	SEC USE ONLY	
4	SOURCE OF FUNDS WC	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e)	|_|
6	CITIZENSHIP OR PLACE OF ORGANIZATION DELAWARE	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7 SOLE VOTING POWER -0-	
	8 SHARED VOTING POWER 10,816,604 SHARES OF COMMON STOCK	
	9 SOLE DISPOSITIVE POWER -0-	
	10 SHARED DISPOSITIVE POWER 10,816,604 SHARES OF COMMON STOCK	

11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 10,816,604 SHARES OF COMMON STOCK	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES	|_|
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 65.94%	
14E	TYPE OF REPORTING PERSON CO	

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ITEM 1. SECURITY AND ISSUER.

This Amendment No. 9 to Schedule 13D amends and supplements the Schedule 13D, as amended, previously filed by the Reporting Persons relating to the common stock, par value $.01 per share (the "Common Stock") of Tangram Enterprise Solutions, Inc. (the "Company"). This Statement on Schedule 13D relates to the acquisition of shares of Series F Convertible Preferred Stock par value $.01 per share (the "Series F Preferred Stock") and the Common Stock into which the Series F Preferred Stock may be converted. The principal executive office of the Company is located at 11000 Regency Parkway, Suite 401, Cary, North Carolina 27511-8504.

ITEM 2. IDENTITY AND BACKGROUND.

(a) - (c) This Schedule 13D is being filed by: Safeguard Scientifics, Inc. ("Safeguard"), Safeguard Delaware, Inc. ("SDI") and Safeguard Scientifics (Delaware), Inc. ("SSDI") (collectively, the "Safeguard Reporting Persons"). Safeguard is a leader in identifying, developing and operating premier technology companies with a focus on three sectors: software, communications and eServices. SDI and SSDI are wholly-owned subsidiaries of Safeguard. Set forth in Schedule I annexed hereto are the name, identity and background of each Safeguard Reporting Person and set forth in Schedule II, III and IV annexed hereto is the information required by Item 2 of Schedule 13D about the identity and background of each Safeguard Reporting Person's directors, executive officers and controlling persons, if any.

The Safeguard Reporting Persons are sometimes referred to herein,

collectively, as the "Reporting Persons," and, individually, as a "Reporting Person."

(d) and (e) During the past five years, no Reporting Person nor, to the best of each Reporting Person's knowledge, any person named in Schedules II-IV to this Schedule 13D, has (I) been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction as a result of which such person was or is subject to a judgment, decree or final order enjoining future violations of or prohibiting or mandating activity subject to federal or state securities laws or finding any violation with respect to such laws.

ITEM 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION.

On February 20, 2001, SDI acquired 3,000 shares of Series F Preferred Stock in exchange for $3,000,000 of the aggregate amount of principal outstanding under a Second Amended Revolving Note dated September 11, 1997 held by SDI (the "February 2001 Exchange"). The stated value of each of the 3,000 shares of Series F Preferred Stock is $1,000. The 3,000 shares of Series F Preferred Stock are convertible at any time at the option of the holder into 1,500,000 shares of Common Stock, as adjusted pursuant to the terms of the Statement of Designations, Preferences and Rights of the Series F Convertible Preferred Stock filed on February 20, 2001 with the Pennsylvania Department of State.

Prior to the February 2001 Exchange, SSDI owned 10,816,604 shares of Common Stock. Amendment No. 8 to this Schedule 13D filed with the United States Securities and Exchange Commission on November 1, 1994 incorrectly stated in rows 8 and 10, respectively, of pages 2 and 3, the shared voting power and aggregate amount beneficially owned by each Reporting Person. As of October 11, 1994, the date of the event which required the filing of Amendment No. 8, each Reporting Person's shared voting power was actually 10,448,738 shares of Common Stock, not 10,548,738 shares of Common Stock, and the aggregate amount beneficially owned by each Reporting Person was actually 19,540,071 shares of Common Stock, not 19,640,071 shares of Common Stock. The aggregate amount beneficially owned by each Reporting Person in the foregoing sentence assumes the conversion of all the then outstanding Series D Convertible Preferred Stock, par value $.01 per share (the "Series D Preferred Stock").

On December 15, 1994, the Company redeemed for cash the 9,091.333 shares of Series D Preferred Stock held by SSDI at a liquidation value of $100 per share over a 13-month period beginning in December 1994.

On December 23, 1999, SSDI acquired 367,866 shares of Common Stock from an officer of the Company for a purchase price of $787,472 in cash from Safeguard's existing working capital. The purpose of the sale was to enable the officer to repay his outstanding loans due to the Company in the amount of $787,472.03.

ITEM 4. PURPOSE OF TRANSACTION.

The Safeguard Reporting Persons have acquired shares of the Company as part of the operating strategy of Safeguard to integrate each of Safeguard's partner companies into a collaborative network that leverages each of their collective knowledge and resources. With the goal of holding its partner company interests for the long-term, Safeguard uses these resources to actively develop the business strategies, operations and management teams of the Company and its other partner companies. Safeguard intends to review, from time to time, its interest in the Company on the basis of various factors, including but not limited to, the Company's business, financial condition, results of operations and prospects, synergies with other partner companies and integration in the network, general economic and industry conditions, as well as other developments and other acquisition opportunities. Based upon those considerations, Safeguard may seek to acquire additional shares of the Company on the open market or in privately negotiated transactions, or to dispose of all or a portion of its shares of the Company.

Safeguard has a strategic relationship with the Company and accordingly, one representative of Safeguard is currently a member of the Board of Directors of the Company. Safeguard anticipates that this strategic relationship will continue.

ITEM 5. INTEREST IN SECURITIES OF THE ISSUER.

The table below sets forth the aggregate number of shares and percentage of the Company's outstanding shares beneficially owned by each Reporting Person. Except as otherwise noted, each person listed has sole voting and dispositive power over all shares listed opposite its name. Any of the aforementioned persons whose names do not appear in the table below do not, to the best of each Reporting Person's knowledge, beneficially own any shares of the Company.

No Reporting Person or director or executive officer of a Reporting Person listed on Schedules II-IV annexed hereto has consummated any transaction in the Company's shares during the past sixty days other than as set forth herein.

	Beneficial Ownership	
	Number of Shares	Percentage of Total
Safeguard Scientifics, Inc.	12,316,604(3)	68.79%(1)

Safeguard Delaware, Inc.	1,500,000(4)	8.38%(1)
Safeguard Scientifics (Delaware), Inc.	10,816,604(5)	65.94%(2)

(1) Calculations based upon 17,905,548 shares outstanding (assuming the conversion of all outstanding shares of Series F Preferred Stock) on February 20, 2001.

(2) Calculations based upon 16,405,548 shares outstanding on February 20, 2001.

(3) Represents the shares of Series F Preferred Stock on an as converted basis beneficially owned by SDI, a wholly-owned subsidiary of Safeguard, and the 10,816,604 shares of Common Stock beneficially owned by SSDI, a wholly-owned subsidiary of Safeguard. Safeguard and each of SDI and SSDI have reported that Safeguard together with each of SDI and SSDI, respectively, have both shared voting and dispositive power with respect to the shares held by each of SDI and SSDI, respectively, because Safeguard is the sole stockholder of each of SDI and SSDI. Excludes an aggregate of 46,538 shares of Common Stock held by certain executive officers and directors of Safeguard and a trust for which one of them is a trustee. Safeguard disclaims beneficial ownership of such shares.

(4) Assumes the conversion of all outstanding shares of the Series F Preferred Stock into Common Stock. The Reporting Person is a wholly-owned subsidiary of Safeguard.

(5) The Reporting Person is a wholly-owned subsidiary of Safeguard.

ITEM 6. CONTRACTS, ARRANGEMENTS, UNDERSTANDINGS OR RELATIONSHIPS WITH RESPECT TO SECURITIES OF THE ISSUER.

The Company and Safeguard are parties to an Investor Rights Agreement dated February 20, 2001 with respect to the transferability of the 3,000 shares of Series F Preferred Stock and the registration with the United States Securities and Exchange Commission of the Common Stock into which the shares of Series F Preferred Stock are convertible.

ITEM 7. MATERIAL TO BE FILED AS EXHIBITS.

1. Securities Conversion Agreement dated February 20, 2001 by and between Tangram Enterprise Solutions, Inc. and Safeguard Scientifics, Inc.

2. Investor Rights Agreement dated February 20, 2001 by and between

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SIGNATURE

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

Date: March 9, 2001

Safeguard Scientifics, Inc.

By: /s/ N. Jeffrey Klauder

N. Jeffrey Klauder
Executive Vice President and
General Counsel

Date: March 9, 2001

Safeguard Delaware, Inc.

By: /s/ N. Jeffrey Klauder

N. Jeffrey Klauder
Vice President

Date: March 9, 2001

Safeguard Scientifics (Delaware), Inc.

By: /s/ N. Jeffrey Klauder

N. Jeffrey Klauder
Vice President

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SCHEDULE I

1. Safeguard Scientifics, Inc.

Safeguard Scientifics, Inc. a Pennsylvania corporation ("Safeguard"), owns all of the outstanding capital stock of Safeguard Delaware, Inc. ("SDI") and Safeguard Scientifics (Delaware) Inc., a Delaware corporation ("SSDI"). Safeguard has an address at 800 The Safeguard Building, 435 Devon Park Drive, Wayne, PA 19087-1945. Safeguard is a leader in identifying, developing and operating premier technology companies with a focus on three sectors: software, communications and eServices. See Schedule II with respect to the executive officers and directors of Safeguard as of the date of filing this Schedule 13D.

2. Safeguard Delaware, Inc.

SDI is a wholly owned subsidiary of Safeguard. SDI is a holding company and has an office at 103 Springer Building, 3411 Silverside Road, P.O. 7048, Wilmington, DE 19803. Schedule III provides information about the executive officers and directors of SDI as of the date of filing this Schedule 13D.

3. Safeguard Scientifics (Delaware), Inc.

SSDI is a wholly owned subsidiary of Safeguard. SSDI is a holding company and has an office at 103 Springer Building, 3411 Silverside road, P.O. Box 7048, Wilmington, DE 19803. Schedule IV provides information about the executive officers and directors of SSDI as of the date of filing this Schedule 13D.

SCHEDULE II

DIRECTORS AND EXECUTIVE OFFICERS OF SAFEGUARD SCIENTIFICS, INC.

Set forth below are the name, business address, present principal occupation or employment of each director and executive officer of Safeguard Scientifics, Inc.

Name and Business Address	Present Principal Employment
EXECUTIVE OFFICERS*	
Warren V. Musser Safeguard Scientifics, Inc. 800 The Safeguard Building 435 Devon Park Drive Wayne, PA 19087	Chairman of the Board and Chief Executive Officer
Harry Wallaesa Safeguard Scientifics, Inc. 800 The Safeguard Building 435 Devon Park Drive Wayne, PA 19087	President and Chief Operating Officer
Jerry L. Johnson Safeguard Scientifics, Inc. 800 The Safeguard Building 435 Devon Park Drive Wayne, PA 19087	Executive Vice President, Operations
Gerald A. Blitstein Safeguard Scientifics, Inc. 800 The Safeguard Building 435 Devon Park Drive Wayne, PA 19087	Executive Vice President and Chief Financial Officer
John Halvey Safeguard Scientifics, Inc. 800 The Safeguard Building 435 Devon Park Drive Wayne, PA 19087	Executive Vice President
N. Jeffrey Klauder Safeguard Scientifics, Inc. 800 The Safeguard Building 435 Devon Park Drive Wayne, PA 19087	Executive Vice President and General Counsel

Name and Business Address	Present Principal Employment
DIRECTORS*	
Vincent G. Bell Jr. Verus Corporation Radnor Corporate Center Suite 520 Radnor, PA 19087	President and Chief Executive Officer, Verus Corporation
Walter W. Buckley, III Internet Capital Group, Inc. Building 600 435 Devon Park Drive Wayne, PA 19087	President and Chief Executive Officer, Internet Capital Group, Inc.
Michael Emmi Systems & Computer Technology Corporation 4 Country View Road Malvern, PA 19355	Chairman, President and CEO, Systems & Computer Technology Corporation
Robert A. Fox R.A.F. Industries One Pitcairn Pl, Suite 2100 165 Township Line Road Jenkintown, PA 19046-3593	President, R.A.F. Industries
Robert E. Keith, Jr. TL Ventures 700 Building 435 Devon Park Drive Wayne, PA 19087	Managing Director of TL Ventures and President and CEO, Technology Leaders Management, Inc.
Jack L. Messman Cambridge Technology Partners 8 Cambridge Center Cambridge, MA 02142	President and CEO, Cambridge Technology Partners
Warren V. Musser Safeguard Scientifics, Inc. 800 The Safeguard Building 435 Devon Park Drive Wayne, PA 19087	Chairman of the Board and Chief Executive Officer
Russell E. Palmer The Palmer Group 3600 Market Street	Chairman and CEO, The Palmer Group

Suite 530
Philadelphia, PA 19104

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Name and Business Address	Present Principal Employment
John W. Poduska, Sr. Advanced Visual Systems, Inc. 300 Fifth Avenue Waltham, MA 02154	Chairman of the Board, Advanced Visual Systems, Inc.
Heinz Schimmelbusch Safeguard International Group, Inc. 400 Building 435 Devon Park Drive Wayne, PA 19087	President, Safeguard International Group, Inc., Chairman, Allied Resource Corporation, Chairman, Metallurg, Inc. and Managing Director, Safeguard International Fund, L.P.
Hubert J.P. Schoemaker Neuronyx, Inc. 200 Great Valley Parkway Malvern, PA 19355	Chairman and Chief Executive Officer, Neuronyx, Inc.
Harry Wallasea Safeguard Scientifics, Inc. 800 The Safeguard Building 435 Devon Park Drive Wayne, PA 19087	President and Chief Operating Officer
Carl J. Yankowski Palm Computing, Inc. 5400 Bayfront Plaza, MS9208 Santa Clara, CA 95054	President and CEO, Palm Computing, Inc.

* All Executive Officers and Directors are U.S. citizens, except Heinz Schimmelbusch, who is a citizen of Austria, and Hubert J.P. Shoemaker, who is a citizen of the Netherlands.

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SCHEDULE III

DIRECTORS AND EXECUTIVE OFFICERS OF SAFEGUARD SCIENTIFICS DELAWARE, INC.

Name and Business Address	Present Principal Employment
EXECUTIVE OFFICERS*	
Harry Wallaesa Safeguard Scientifics, Inc. 800 The Safeguard Building 435 Devon Park Drive Wayne, PA 19087	President
Jerry L. Johnson Safeguard Scientifics, Inc. 800 The Safeguard Building 435 Devon Park Drive Wayne, PA 19087	Vice President
Gerald A. Blitstein Safeguard Scientifics, Inc. 800 The Safeguard Building 435 Devon Park Drive Wayne, PA 19087	Vice President and Treasurer
John Halvey Safeguard Scientifics, Inc. 800 The Safeguard Building 435 Devon Park Drive Wayne, PA 19087	Vice President
N. Jeffrey Klauder Safeguard Scientifics, Inc. 800 The Safeguard Building 435 Devon Park Drive Wayne, PA 19087	Vice President and Assistant Secretary
DIRECTORS*	
Joseph DeSanto Safeguard Scientifics, Inc. 800 The Safeguard Building	Vice President, Safeguard Scientifics, Inc.

435 Devon Park Drive
Wayne, PA 19087

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Name and Business Address	Present Principal Employment
Tonya Zweier Safeguard Scientifics, Inc. 800 The Safeguard Building 435 Devon Park Drive Wayne, PA 19087	Vice President, Safeguard Scientifics, Inc.
Mary Alice Avery 103 Springer Building 3411 Silverside Road Wilmington, DE 19810	Assistant Secretary

* All Executive Officers and Directors are U.S. Citizens.

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SCHEDULE IV

EXECUTIVE OFFICERS AND DIRECTORS OF SAFEGUARD SCIENTIFICS (DELAWARE), INC.

Set forth below are the name, business address, present principal occupation or employment of each director and executive officer of Safeguard Scientifics (Delaware), Inc.

Name and Business Address	Present Principal Employment
EXECUTIVE OFFICERS*	

Harry Wallaesa Safeguard Scientifics, Inc. 800 The Safeguard Building 435 Devon Park Drive Wayne, PA 19087	President
Jerry L. Johnson Safeguard Scientifics, Inc. 800 The Safeguard Building 435 Devon Park Drive Wayne, PA 19087	Vice President
Gerald A. Blitstein Safeguard Scientifics, Inc. 800 The Safeguard Building 435 Devon Park Drive Wayne, PA 19087	Vice President and Treasurer
John Halvey Safeguard Scientifics, Inc. 800 The Safeguard Building 435 Devon Park Drive Wayne, PA 19087	Vice President
N. Jeffrey Klauder Safeguard Scientifics, Inc. 800 The Safeguard Building 435 Devon Park Drive Wayne, PA 19087	Vice President and Assistant Secretary

DIRECTORS*

Joseph De Santo Safeguard Scientifics, Inc. 800 The Safeguard Building 435 Devon Park Drive Wayne, PA 19087	Vice President, Safeguard Scientifics, Inc.

Name and Business Address	Present Principal Employment
Tonya Zweier Safeguard Scientifics, Inc. 800 The Safeguard Building 435 Devon Park Drive	Vice President, Safeguard Scientifics, Inc.

Wayne, PA 19087

Mary Alice Avery — Assistant Secretary
103 Springer Building
3411 Silverside Road
Wilmington, DE 19810

* All Executive Officers and Directors are U.S. Citizens.

EXECUTION ORIGINAL

EXHIBIT 1

TANGRAM ENTERPRISE SOLUTIONS, INC.

SECURITIES CONVERSION AGREEMENT

THIS SECURITIES CONVERSION AGREEMENT (the "Agreement") is entered into as of February 20, 2001 by and between Tangram Enterprise Solutions, Inc., a Pennsylvania corporation (the "Company") and Safeguard Scientifics, Inc., a Pennsylvania corporation ("Safeguard").

RECITALS

WHEREAS, Safeguard agreed on September 11, 1997 to lend to the Company on a revolving basis up to $6,000,000 (the "Debt Financing"). The Debt Financing was evidenced by a Second Amended Revolving Note with a principal amount of $6,000,000 dated September 11, 1997, which is attached hereto as Exhibit A (the "Existing Note"). As of the date hereof and prior to the Conversion (as defined below), the outstanding principal and interest under the Note is $3,581,867.38.

WHEREAS, the Company and Safeguard desire to exchange $3,000,000 of the aggregate amount of principal outstanding under the Existing Note for shares of Series F Convertible Preferred Stock of the Company ("Series F Preferred Stock") on the terms set forth herein (the "Conversion").

WHEREAS, in connection with the Conversion, the Company desires to amend the Existing Note to reduce the amount which may be borrowed thereunder to $3,000,000, of which $500,000 of principal and $81,867.38 of accrued but unpaid interest will be outstanding immediately after the Conversion.

WHEREAS, the Company and Safeguard desire to enter into an Investors' Rights Agreement (the "Investor Rights Agreement").

NOW, THEREFORE, in consideration of the foregoing recitals and the mutual promises hereinafter set forth, the parties hereto agree as follows:

1. CONVERSION/NEW NOTE.

1.1 Conversion. Safeguard hereby converts $3,000,000 of the aggregate amount of principal outstanding under the Existing Note as of the date hereof into 3,000 shares of

Series F Preferred Stock (the "Shares"), the receipt of certificates

representing the Shares which is hereby acknowledged by Safeguard. The stated value of each share of Series F Preferred Stock shall be equal to $1,000 per share. The shares of Series F Preferred Stock shall have the rights, preferences, privileges and restrictions set forth in the Statement of Designations, Preferences and Rights of the Company's Series F Convertible Preferred Stock, in the form attached hereto as Exhibit B (the "Designations").

1.2 Amendment of Existing Note. Contemporaneously with the execution hereof, Safeguard and the Company shall enter into the First Amendment to the Second Amended Revolving Note, in the form attached hereto as Exhibit C (the "Note Amendment").

2. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

Except as set forth on the disclosure schedules hereby delivered by the Company to Safeguard (the "Schedules"), the Company represents and warrants to Safeguard as of the date hereof as follows:

2.1 Organization, Good Standing and Qualification. The Company is a corporation duly organized, validly existing and in good standing under the laws of the Commonwealth of Pennsylvania. The Company has all requisite corporate power and authority to own and operate its properties and assets, to execute and deliver this Agreement, the Investor Rights Agreement, the Note Amendment and any other agreements to be delivered by the Company that are contemplated herein or delivered pursuant hereto (collectively, the "Related Agreements"), and, to the extent applicable, to issue the Shares and to carry out the provisions of this Agreement, the Related Agreements and the Designations and to carry on its business as currently conducted and as currently proposed to be conducted. The Company is duly qualified, is authorized to do business and is in good standing as a foreign corporation in each jurisdiction in which the nature of its activities and of its properties (both owned and leased) makes such qualification necessary, except for those jurisdictions in which failure to do so would not have a material adverse effect on the Company or the Company's business.

2.2 Capitalization; Voting Rights. The authorized capital stock of the Company consists of 50,000,000 shares, such shares being designated as follows: (i) 48,000,000 shares of common stock, par value $.01 per share (the "Common Stock") of which (a) 16,405,548 are issued and outstanding and (b) (1) 3,323,700 shares are reserved for future issuance to employees pursuant to the Company's 1997 Equity Compensation Plan adopted by the Company on May 21, 1997, the Company's 1988 Stock Option Plan and the Company's Stock Option Plan for Directors (the "Stock Option Plans") and (2) 3,000,000 shares are reserved for issuance pursuant to the Asset Purchase Agreement, dated February 13, 2001 by and among the Company, Axial Technology Holding AG and Wyzdom Solutions, Inc. (the "Asset Purchase Agreement"); (ii) 2,000,000 shares of preferred stock, par value $.01 per share, consisting of 500,000 shares of Series A Convertible Preferred Stock, par value $.10 per share, of which no shares are issued and outstanding, 200,000 shares of Series B Convertible Preferred Stock, par value $.01 per share, of which no shares are issued and outstanding, 250,000 shares of Series C Convertible Preferred Stock, par value $.01 per share, of which no

shares are issued and

outstanding, 9,500 shares of Series D Convertible Preferred Stock, par value $.01 per share, of which no shares are issued and outstanding, 1,800 shares of Series E Redeemable Preferred Stock, par value $.01 per share, of which no shares are issued and outstanding, and 3,000 shares of Series F Convertible Preferred Stock, par value $.01 per share (the "Series F Preferred Stock"), of which 3,000 shares will be upon consummation of the transactions contemplated hereby issued and outstanding. The Shares have been duly authorized, and upon consummation of the Conversion, will be fully paid and non-assessable and issued in compliance with all applicable state and federal laws concerning the issuance of securities. All issued and outstanding shares of the Common Stock and the Shares (i) have been duly authorized and validly issued, (ii) are fully paid and nonassessable and (iii) were issued in compliance with all applicable state and federal laws concerning the issuance of securities. The rights, preferences, privileges and restrictions of the Shares are as stated in the Designations, which was accepted for filing by the Pennsylvania Department of State prior to the date hereof. The shares of Common Stock issuable upon conversion of the Shares pursuant to the terms of the Designations (the "Conversion Shares") have been duly and validly reserved for issuance. Other than the 3,323,700 shares reserved for issuance under the Stock Option Plans and 3,000,000 shares of Common Stock to be issued pursuant to the Asset Purchase Agreement, there are no outstanding options, warrants, rights (including conversion or preemptive rights and rights of first refusal), proxy or shareholder agreements, or agreements of any kind for the purchase or acquisition from the Company of any of its securities. The Shares are free of any liens or encumbrances; provided, however, that the Shares may be subject to restrictions on transfer under state and/or federal securities laws. When issued in compliance with the provisions of the Designations, the Conversion Shares will be validly issued, fully paid and nonassessable, and will be free of any liens or encumbrances other than liens and encumbrances; provided, however, that the Conversion Shares may be subject to restrictions on transfer under state and/or federal securities laws.

2.3 Authorization; Binding Obligations. All action (corporate or otherwise) on the part of the Company, and its officers, directors and shareholders, necessary for the authorization of this Agreement and the Related Agreements, the performance of all obligations of the Company hereunder and thereunder and the authorization, issuance and delivery of the Shares pursuant hereto and the Conversion Shares pursuant to the Designations have been taken. Upon their execution and delivery, this Agreement and the Related Agreements will be valid and binding obligations of the Company enforceable in accordance with their terms, except (a) as limited by applicable bankruptcy, insolvency, reorganization, moratorium or other laws of general application affecting enforcement of creditors' rights; (b) general principles of equity that restrict the availability of equitable remedies; and (c) to the extent that the

enforceability of the indemnification provisions in Sections 2.9 or 3.5 of the Investor Rights Agreement may be limited by applicable laws. The issuance of the Shares and the subsequent conversion of the Shares into Conversion Shares are not and will not be subject to any preemptive rights or rights of first refusal that have not been properly waived or complied with. Neither the execution and delivery of this Agreement or the Related Agreements, nor the performance of any of the transactions contemplated hereby or thereby will, directly or indirectly, with or without notice or lapse of time, contravene, conflict with or result in a material violation or breach of, or give any person or entity the right to declare a default or exercise any remedy under, or to accelerate the

maturity or performance of, or to cancel, terminate or modify any applicable contract legally binding on the Company.

2.4 SEC Documents . The Company has filed all reports, schedules, forms, statements and other documents required to be filed by it with the United States Securities and Exchange Commission (the "SEC") pursuant to the reporting requirements of the Securities Exchange Act of 1934, as amended, and any rules or regulations promulgated thereunder (the "Exchange Act"), on a timely basis (all of the foregoing, together with all reports, schedules, forms, statements and other documents filed by Company's subsidiaries with the SEC, and all exhibits included therein and financial statements and schedules thereto and documents (other than exhibits) incorporated by reference therein, being hereinafter referred to herein as the "SEC Documents"). As of their respective dates, the SEC Documents complied in all material respects with the requirements of the Exchange Act applicable to the SEC Documents, and none of the SEC Documents, at the time they were filed with the SEC, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. As of the date hereof, the information contained in the SEC Documents, when viewed in the context of the total mix of information publicly available concerning the Company, does not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.

3. REPRESENTATIONS AND WARRANTIES OF SAFEGUARD.

Safeguard hereby represents and warrants to the Company as follows (such representations and warranties do not lessen or obviate the representations and warranties of the Company set forth in this Agreement):

3.1 Requisite Power and Authority. Safeguard has all necessary power and authority under all applicable provisions of law to execute and

deliver this Agreement and the Related Agreements and to carry out their provisions. Upon their execution and delivery, this Agreement and the Related Agreements will be valid and binding obligations of Safeguard, enforceable in accordance with their terms, except (a) as limited by applicable bankruptcy, insolvency, reorganization, moratorium or other laws of general application affecting enforcement of creditors' rights, (b) general principles of equity that restrict the availability of equitable remedies, and (c) to the extent that the enforceability of the indemnification provisions of Sections 2.9 or 3.5 of the Investor Rights Agreement may be limited by applicable laws.

3.2 Investment Representations. Safeguard understands that neither the Shares nor the Conversion Shares have been registered under the Securities Act. Safeguard also understands that the Shares (and the Conversion Shares) are being offered and sold pursuant to an exemption from registration contained in the Securities Act based in part upon Safeguard's representations contained in this Agreement. Safeguard hereby represents and warrants as follows:

(a) Safeguard Bears Economic Risk. Safeguard has substantial experience in evaluating and investing in private placement transactions of securities in companies similar to the Company so that it is capable of evaluating the merits and risks of its investment in the Company and has the capacity to protect its own interests. Safeguard must bear the economic risk of this investment indefinitely unless the Shares (or the Conversion Shares) are registered pursuant to the Securities Act, or an exemption from registration is available. Safeguard also represents it has not been organized for the purpose of acquiring the Shares (or the Conversion Shares).

(b) Acquisition for Own Account. Safeguard is acquiring the Shares and the Conversion Shares for Safeguard's own account, not as nominee or agent, for investment only, and not with a view towards their resale or distribution or any part thereof, and Safeguard has no present intention of selling, granting any participation in or otherwise distributing the same. By executing this Agreement, Safeguard further represents that Safeguard does not have any contract, undertaking, agreement or arrangement with any person to sell, transfer or grant participations to such person or to any third person, with respect to any of the Shares or the Conversion Shares.

(c) Safeguard Can Protect Its Interest. Safeguard represents that by reason of its, or of its management's, business or financial experience, Safeguard has the capacity to protect its own interests in connection with the transactions contemplated in this Agreement, and the Related Agreements. Further, Safeguard is aware of no publication of any advertisement in connection with the transactions contemplated in the Agreement.

(d) Accredited Safeguard. Safeguard represents that

it is an "accredited investor" within the meaning of Regulation D under the Securities Act.

(e) Company Information. Safeguard has received and read all information of the Company requested by Safeguard and has had an opportunity to discuss the Company's business, management and financial affairs with directors, officers and management of the Company and has had the opportunity to review the Company's operations and facilities. Safeguard has also had the opportunity to ask questions of and receive answers from, the Company and its management regarding the terms and conditions of this investment.

4. MISCELLANEOUS.

4.1 Further Assurances. After the date hereof, consistent with the terms and conditions hereof, each party hereto will execute and deliver such other documents and take such other actions as reasonably requested by the other party to in order to carry out this Agreement, the Related Agreements and the transactions contemplated hereby and thereby.

4.2 Governing Law. This Agreement shall be governed in all respects by the laws of the Commonwealth of Pennsylvania without regard to the conflicts of laws principals of any jurisdiction.

4.3 Survival. The representations, warranties, covenants and agreements made herein shall survive the execution of this Agreement. All statements as to factual matters contained in any certificate or other instrument delivered by or on behalf of the Company pursuant hereto in connection with the transactions contemplated hereby shall be deemed to be representations and warranties by the Company hereunder solely as of the date of such certificate or instrument.

4.4 Successors and Assigns. Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto and shall inure to the benefit of and be enforceable by each person who shall be a holder of the Shares and the Conversion Shares from time to time.

4.5 Entire Agreement. This Agreement, the Exhibits and Schedules hereto, the Related Agreements, the Designations and the other documents delivered pursuant hereto constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and no party shall be liable or bound to any other in any manner by any representations, warranties, covenants and agreements except as specifically set forth herein and therein.

4.6 Severability. In case any provision of the Agreement shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

4.7 Amendment and Waiver.

(a) This Agreement may be amended or modified only upon the written consent of the Company and the holders of at least a majority of the Shares (treated as if converted and including any Conversion Shares into which the Shares have been converted).

(b) The obligations of the Company and the rights of the holders of the Shares and the Conversion Shares under the Agreement may be waived only with the written consent of the holders of at least a majority of the Shares (treated as if converted and including any Conversion Shares into which the Shares have been converted).

4.8 Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any party, upon any breach, default or noncompliance by another party under this Agreement, the Related Agreements or the Designations, shall impair any such right, power or remedy, nor shall it be construed to be a waiver of any such breach, default or noncompliance, or any acquiescence therein, or of or in any similar breach, default or noncompliance thereafter occurring. Any waiver, permit, consent or approval of any kind or character on Safeguard's part of any breach, default or noncompliance under this Agreement, the Related Agreements or under the Designations or any waiver on such party's part of any provisions or conditions of the Agreement, the Related Agreements, or the Designations must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this

Agreement, the Related Agreements, the Designations, by law, or otherwise afforded to any party, shall be cumulative and not alternative.

4.9 Notices. All notices required or permitted hereunder shall be in writing and shall be deemed effectively given: (a) upon personal delivery to the party to be notified; (b) when sent by confirmed telex or facsimile if sent during normal business hours of the recipient, and if not, then on the next business day; (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be

sent to the Company at the address as set forth on the signature page hereof and to Safeguard at the address set forth on the signature page hereof attached hereto or at such other address as the Company or Safeguard may designate by ten (10) days advance written notice to the other parties hereto.

4.10 Expenses. Each party shall pay all costs and expenses that it incurs with respect to the negotiation, execution, delivery and performance of the Agreement; provided, however, that the Company shall reimburse Safeguard Scientifics, Inc. or its designees for its reasonable legal fees and expenses, not to exceed $10,000, incurred in connection with the negotiation, execution, delivery and performance of this Agreement and the transactions contemplated hereby.

4.11 Titles and Subtitles. The titles of the sections and subsections of the Agreement are for convenience of reference only and are not to be considered in construing this Agreement.

4.12 Counterparts. This Agreement and any amendment or supplement hereto may be executed by the parties in separate counterparts, whether originally or by facsimile, each of which when so executed and delivered, shall be an original, but all such counterparts shall together constitute one and the same agreement.

4.13 Broker's Fees. Each party hereto represents and warrants that no agent, broker, investment banker, person or firm acting on behalf of or under the authority of such party hereto is or will be entitled to any broker's or finder's fee or any other fee or commission directly or indirectly in connection with the transactions contemplated herein. Each party hereto further agrees to indemnify each other party for any claims, losses or expenses incurred by such other party as a result of the representation in this Section 4.13 being untrue.

4.14 Pronouns. All pronouns contained herein, and any variations thereof, shall be deemed to refer to the masculine, feminine or neutral, singular or plural, as to the identity of the parties hereto may require.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties hereto have executed this Securities Conversion Agreement as of the date set forth in the first paragraph hereof.

COMPANY:	SAFEGUARD:
TANGRAM ENTERPRISE SOLUTIONS, INC.	SAFEGUARD SCIENTIFICS, INC.
By: _____	By: _____
Name: _____	Name: _____
Title: _____	Title: _____
Address: 11000 Regency Parkway Suite 401 Cary, North Carolina 27511-8504	Address: 800 Safeguard Bldg. 435 Devon Park Drive Wayne, PA 19087-1945

EXHIBIT A

SECOND AMENDED REVOLVING NOTE

Wayne, Pennsylvania
$6,000,000 September 11, 1997

FOR VALUE RECEIVED, Tangram Enterprise Solutions, Inc., a Pennsylvania corporation (the "Borrower"), having an office at 11000 Regency Parkway, Suite 401, Cary, North Carolina 27511-8504, hereby promises to pay to the order of Safeguard Scientifics, Inc., a Delaware corporation (the "Lender") or its registered assigns, at the Lender's office located at 435 Devon Park Drive, Wayne, Pennsylvania 19087 or at such other place in the continental United States as the Lender may designate in writing, upon demand, in lawful money of the United States, and in immediately available funds, the principal sum of up to Six Million and no/100 Dollars ($6,000,000), or so much thereof as shall have been advanced by the Lender to the Borrower as hereinafter set forth and then be outstanding, and to pay interest thereon monthly in arrears on the first business day of each calendar month at an annual rate equal to the announced prime rate of PNC Bank, N.A. of Philadelphia, Pennsylvania (the "Prime Rate") plus one percent (1%). All amounts advanced hereon, but not to exceed $6,000,000 at any one time outstanding in the aggregate, shall be so advanced upon the request of the Borrower. All amounts so advanced hereon and all payments made on account of the principal hereof shall be recorded in the books of the Lender, which records shall be final and binding, but failure to do so shall not release

the Borrower from any of its obligations hereunder.

This Note is issued in substitution for a Revolving Note dated April 2, 1997, and shall evidence all outstanding indebtedness thereunder existing as of the date hereof and any additional indebtedness incurred in the future.

Borrower's obligations under this Note, regardless of whether demand for payment has been made by Lender, are subject and subordinate to all of Borrower's obligations to Wachovia Bank of North Carolina, N.A. ("Wachovia Bank"), and all liens and security interests granted by Borrower to Wachovia Bank. Upon the occurrence of an event of default by Borrower under any note, loan agreement or related agreement or instrument between Borrower and Wachovia Bank, Borrower shall immediately notify Lender, regardless of whether demand for payment has been made by Lender, and Lender shall not exercise any of its rights or remedies against Borrower, and Borrower shall not make any payments to Lender hereunder, for a period of 90 days thereafter without the consent of Wachovia Bank. so long as there is no uncured event of default outstanding under any Wachovia Bank loan, Borrower may make all required payments to Lender under this Note.

The unpaid principal balance of the Note shall be paid on the date which is one year and one month after the date of demand for payment by the Lender; provided that, in the event of a sale of substantially all of the assets of Borrower, a merger or consolidation of Borrower with or into a third party, or the acquisition of a majority of Borrower's outstanding voting stock by a "person" (as such term is defined under Section 13 of the Securities Exchange Act of 1934, as amended) other than Safeguard Scientifics, Inc., or any of its wholly-owned subsidiaries, the unpaid principal balance of the Note shall be paid on the date which is five days after the date of demand for payment by the Lender. In addition, upon the closing of a sale of debt or equity securities by the Company to any third party, the Company shall apply the proceeds (net of underwriting discounts and commissions) in excess of $2,500,000 first to the repayment of the then outstanding obligations under this Note.

All payments made on this Note (including, without limitation, prepayments) shall be applied, at the option of the Lender, first to late charges and collection costs, if any, then to accrued interest and then to principal. Interest

payable hereunder shall be calculated for actual days elapsed on the basis of a 360-day year. Accrued and unpaid interest shall be due and payable upon maturity of this Note. After maturity or in the event of default, interest shall continue to accrue on the Note at the rate set forth above and shall be payable on demand of the Lender.

Unless there is an uncured event of default under any Wachovia Bank loan, the outstanding principal amount of this Note may be prepaid by the Borrower upon notice to the Lender in whole at any time or in part from time to time without any prepayment penalty or premium; provided, that upon such payment any interest due to the date of such prepayment on such prepaid amount shall also be paid.

Notwithstanding anything in this Note, the interest rate charged hereon shall not exceed the maximum rate allowable by applicable law. If any stated interest rate herein exceeds the maximum allowable rate, then the interest rate shall be reduced to the maximum allowable rate, and any excess payment of interest made by the Borrower at any time shall be applied to the unpaid balance of any outstanding principal of this Note.

An event of default hereunder shall consist of:

(i) a default in the payment by the Borrower to the Lender of principal or interest under this Note as and when the same shall become due and payable;

(ii) an event of default by the Borrower under any other obligation, instrument, note or agreement for borrowed money, beyond any applicable notice and/or grace period;

(iii) institution of any proceeding by or against the Borrower under any present or future bankruptcy or insolvency statute or similar law and, if involuntary, if the same are not stayed or dismissed within sixty (60) days, or the Borrower's assignment for the benefit of creditors or the appointment of a receiver, trustee, conservator or other judicial representative for the Borrower or the Borrower's property or the Borrower's being adjudicated a bankrupt or insolvent.

Upon the occurrence of any event of default, interest shall accrue on the outstanding balance of this Note at the Prime Rate plus three percent (3%), the entire unpaid principal amount of this Note and all unpaid interest accrued thereon shall, at the sole option of the Lender, without notice, become immediately due and payable, and the Lender shall thereupon have all the rights and remedies provided hereunder or now or hereafter available at law or in equity.

Any action, suit or proceeding where the amount in controversy as to at least one party, exclusive of interest and costs, exceeds $1,000,000 ("Summary Proceeding"), arising out of or relating to this Agreement, or the breach, termination or validity thereof, shall be litigated exclusively in the Superior Court of the State of Delaware (the "Delaware Superior Court") as a summary proceeding pursuant to Rules 124-131 of the Delaware Superior Court, or any successor rules (the "Summary Proceeding Rules"). Each of the parties hereto hereby irrevocably and unconditionally (i) submits to the jurisdiction of the Delaware Superior Court for any Summary Proceeding, (ii) agrees not to commence any Summary Proceeding except in the Delaware Superior Court, (iii) waives, and agrees not to plead or to make, any objection to the venue of any Summary

Proceeding in the Delaware Superior Court, (iv) waives, and agrees not to plead or to make, any claim that any Summary Proceeding brought in the Delaware Superior Court has been brought in an improper or otherwise inconvenient forum, (v) waives, and agrees not to plead or to make, any claim that the Delaware Superior Court lacks personal jurisdiction over it, (vi) waives its right to remove any Summary Proceeding to the federal courts except where such courts are vested with sole and

exclusive jurisdiction by statute and (vii) understands and agrees that it shall not seek a jury trial or punitive damages in any Summary Proceeding based upon or arising out of or otherwise related to this Agreement waives any and all rights to any such jury trial or to seek punitive damages.

In the event any action, suit or proceeding where the amount in controversy as to at least one party, exclusive of interest and costs, does not exceed $1,000,000 (a "Proceeding"), arising out of or relating to this Agreement or the breach, termination or validity thereof is brought, the parties to such Proceeding agree to make application to the Delaware Superior Court to proceed under the Summary Proceeding Rules. Until such time as such application is rejected, such Proceeding shall be treated as a Summary Proceeding and all of the foregoing provisions of this Section relating to Summary Proceedings shall apply to such Proceeding.

If a Summary Proceeding is not available to resolve any dispute hereunder, the controversy or claim shall be settled by arbitration conducted on a confidential basis, under the U.S. Arbitration Act, if applicable, and the then current Commercial Arbitration Rules of the American Arbitration Association (the "Association") strictly in accordance with the terms of this Agreement and the substantive law of the State of Delaware. The arbitration shall be conducted at the Association's regional office located closest to the Borrower's principal place of business by three arbitrators, at least one of whom shall be knowledgeable in software design, programming and implementation and one of whom shall be an attorney. Judgment upon the arbitrators' award may be entered and enforced in any court of competent jurisdiction. Neither party shall institute a proceeding hereunder unless at least 60 days prior thereto such party shall have given written notice to the other party of its intent to do so.

Neither party shall be precluded hereby from securing equitable remedies in courts of any jurisdiction, including, but not limited to, temporary restraining orders and preliminary injunctions to protect its rights and interests but shall not be sought as a means to avoid or stay arbitration or

Summary Proceedings.

The Borrower hereby waives presentment, demand, protest and notice of dishonor and protest, and also waives all other exemptions; and agrees that extension or extensions of the time of payment of this Note or any installment or part thereof may be made before, at or after maturity by agreement by the Lender. Upon default hereunder the Lender shall have the right to offset the amount owed by the Borrower against any amounts owed by the Lender in any capacity to the Borrower, whether or not due, and the Lender shall be deemed to have exercised such right of offset and to have made a charge against any such account or amounts immediately upon the occurrence of an event of default hereunder even though such charge is made or entered on the books of the Lender subsequent thereto. The Borrower shall pay to the Lender, upon demand, all costs and expenses, including, without limitation, attorneys' fees and legal expenses, that may be incurred by the Lender in connection with the enforcement of this Note.

Notices required to be given hereunder shall be deemed validly given (i) three business days after sent, postage prepaid, by certified mail, return receipt requested, (ii) one business day after sent, charges paid by the sender, by Federal Express Next Day Delivery or other guaranteed delivery service, (iii) when sent by facsimile transmission, or (iv) when delivered by hand:

If to the Lender: Safeguard Scientifics (Delaware), Inc.
800 The Safeguard Building
435 Devon Park Drive
Wayne, Pennsylvania 19087
Attn: Michael W. Miles
Vice President and Chief Financial Officer

If to the Borrower: Tangram enterprise Solutions, Inc.
11000 Regency Parkway
Suite 401
Cary, North Carolina 27511-8504
Attn: John Nelli, Chief Financial Officer

or to such other address, or in care of such other person, as the holder or the Borrower shall hereafter specify to the other from time to time by due notice.

Any failure by the Lender to exercise any right hereunder shall not be construed as a waiver of the right to exercise the same or any other right at any time. No amendment to or modification of this Note shall be binding upon the Lender unless in writing and signed by it. Any provision hereof found to be illegal, invalid or unenforceable for any reason whatsoever shall not affect the validity, legality or enforceability of the remainder hereof.

This Note shall apply to and bind the successors of the Borrower and shall inure to the benefit of the Lender, its successors and assigns.

This Note shall be governed by and interpreted in accordance with the laws of the State of Delaware.

IN WITNESS WHEREOF, the Borrower, by its duly authorized officer intending to be legally bound hereby, has duly executed this First Amended Revolving Note as of the date first written above.

/s/ John N. Nelli

Print Name: John N. Nelli
Title: Senior Vice President and
Chief Financial Officer

EXHIBIT B

EXHIBIT A

TANGRAM ENTERPRISE SOLUTIONS, INC.

STATEMENT OF DESIGNATIONS, PREFERENCES AND RIGHTS
OF THE SERIES F CONVERTIBLE PREFERRED STOCK

PURSUANT TO SECTION 1522 OF THE
BUSINESS CORPORATION LAW OF THE COMMONWEALTH OF PENNSYLVANIA

Tangram Enterprise Solutions, Inc., a corporation organized and existing under the laws of the Commonwealth of Pennsylvania, does hereby certify that, pursuant to the authority conferred upon the Corporation's Board of Directors (the "Board") by Article 5 of these Articles of Incorporation of the Corporation, which authorized 2,000,000 shares of Preferred Stock of the Corporation, $.01 par value per share ("Preferred Stock"), and pursuant to the provisions of the Pennsylvania Business Corporation Law of 1988, as amended (the "PBCL"), the Board of Directors, at a duly called meeting held on February 19, 2001, has duly adopted resolutions providing for the issuance of up to 3,000 shares of Series F Convertible Preferred Stock and setting forth the voting powers, designations, preferences and relative, participating, optional and other special rights, and the qualifications, limitations and restrictions thereof, which are as follows:

1. Designation of the Series.The shares of such series of preferred stock shall be designated as "Series F Convertible Preferred Stock" (the "Series F Preferred Stock") and the number of shares constituting such series shall be 3,000. The par value of the Series F Preferred Stock shall be $.01 per share and the issuance price of the Series F Preferred Stock shall be $1,000 per share (the "Purchase Price").

2. Dividends.

2.1 Accrual of Dividends. The holders of the then outstanding shares of Series F Preferred Stock shall be entitled to receive, out of funds legally available therefor, cumulative quarterly dividends when and as if they may be declared by the Board at a rate per share equal to two percent (2%) per quarter of the Purchase Price. The amount of such dividend shall be compounded daily such that if the dividend is not paid for such day, the unpaid amount shall be added to the original Purchase Price for purposes of calculating succeeding days' dividends. Such dividends shall accrue on the Series F Preferred Stock commencing on the date of original issuance thereof and be cumulative, whether or not earned or declared and whether or not there are profits, surplus or other funds of the Corporation legally available for the payment of dividends. If such cumulative dividends in respect of any prior or current daily dividend period shall not have been declared and paid or if there shall not have been a sum sufficient for the payment thereof set apart, the deficiency shall first be fully-paid before any dividend or other distribution shall be paid or declared and set apart with respect to any class of the Corporation's capital stock, now or hereafter outstanding. All numbers relating to the calculation of dividends pursuant to this Section 2.1 shall be subject to appropriate adjustment whenever there shall occur a stock split, combination, reclassification or other similar event involving or affecting a change in the Corporation's capital structure.

2.3 Dividends In Kind. Notwithstanding anything to the contrary contained herein, in the event the Corporation shall make or Issue, or shall fix a record date for the determination of holders of the Corporation's Common Stock ("Common Stock") entitled to receive, a dividend or other distribution with respect to

the Common Stock payable in (i) securities of the Corporation other than shares of Common Stock or (ii) assets, then, and in each such event, the holders of Series F Preferred Stock shall receive, at the same time such distribution is made with respect to Common Stock, the number of securities or other such assets of the Corporation which such holders would have received had their shares of Series F Preferred Stock been converted into Common Stock, in the manner

hereinafter set forth, immediately prior to the record date for determining holders of Common Stock entitled to receive such distribution.

2.4 Restrictions On Distributions. Except to the extent that in any instance approval is provided in writing by the Majority Interest of the holders of the outstanding shares of Series F Preferred Stock, for so long as any shares of Series F Preferred Stock are outstanding the Corporation shall not declare or pay any dividends on, or purchase, redeem, retire, or otherwise acquire for value, any shares of its capital stock (or rights, options or warrants to purchase such shares) now or hereafter outstanding, return any capital or make any distribution to the holders of any capital stock, or permit any Subsidiary (as defined below) to do any of the foregoing, except as set forth in these Articles of Incorporation in connection with the Series F Preferred Stock. "Subsidiary" or "Subsidiaries" means any corporation, partnership, or joint venture or other entity of which the Corporation and/or any of its other Subsidiaries (as herein defined) directly or indirectly owns at the time at least fifty percent (50%) of the outstanding voting shares or similar interests. Notwithstanding the foregoing, Subsidiaries may declare and make payment of cash and stock dividends, return capital and make distributions of assets to the Corporation, and nothing contained in the foregoing shall prevent the Corporation from: (i) effecting a stock split or declaring or paying any dividend consisting of shares of any class of capital stock paid to the holders of shares of such class of capital stock, subject to the provisions of these Articles of Incorporation; (ii) complying with any specific provision of the terms of any currently or subsequently designated series of Preferred Stock in accordance with its terms; (iii) redeeming or repurchasing any stock of a deceased shareholder out of proceeds of insurance held by the Corporation on that shareholder's life; or (iv) redeeming or repurchasing any stock of any director, officer, employee, advisor, consultant or other person or entity, pursuant to a stock repurchase agreement, stock restriction agreement or other similar agreement under which the Corporation has the right or obligation to repurchase such shares in the event of death, termination of employment or of the consulting arrangement, or other similar discontinuation of a business relationship.

3. Liquidation, Dissolution and Winding Up.

3.1 Treatment at Liquidation, Dissolution or Winding Up.

3.1.1 Liquidation Preference. In the event of any liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary, or in the event of its insolvency, the holders of each share of Series F Preferred Stock shall be entitled to be paid out of the assets of the Corporation available for distribution to holders of the Corporation's capital stock of all classes, whether such assets are capital, surplus or earnings ("Available Assets"), before any distribution or payment is made to any holders of Common Stock or any other class or series of capital stock of the Corporation designated to be junior to the Series F Preferred Stock in liquidation preference (collectively, "Junior Stock"), an amount (the "Liquidation Preference") equal to: (i) an amount per share of Series F Preferred Stock equal to the Purchase Price plus all accrued but unpaid dividends on such Series F

Preferred Stock, if such amount plus the amount which should be payable to the holders of the shares of Series F Preferred Stock pursuant to Section 3.1.2 below (assuming that the distribution to such holders was made pursuant to this clause (i)) is greater than such amount per share of Series F Preferred Stock as would have been payable had each share of Series F Preferred Stock been converted into Common Stock immediately prior to such liquidation, dissolution or winding up (the "Conversion Amount"), and otherwise (ii) the Conversion Amount. If, upon liquidation, dissolution or winding up of the Corporation, the Available Assets shall be insufficient to pay the holders of Series F Preferred Stock the full amounts to which such holders otherwise would be entitled, the holders of Series F Preferred Stock shall share ratably in any distribution of Available Assets pro rata in proportion to the

respective liquidation preference amounts which would otherwise be payable upon liquidation with respect to the outstanding shares of the Series F Preferred Stock if all liquidation preference dollar amounts with respect to such shares were paid in full.

3.1.2 Participation Rights. After payment of all liquidation preference amounts to all holders of Preferred Stock pursuant to Section 3.1.1 above but only if such payment was made pursuant to clause (i) of Section 3.1.1, the entire remaining Available Assets, if any, shall be distributed among the holders of Common Stock, Series F Preferred Stock and any other class or series of Preferred Stock entitled to participate with the Common Stock in a liquidating distribution, in proportion to the shares of Common Stock then held by them and the shares of Common Stock which they then have the right to acquire upon conversion of such shares of Preferred Stock held by them.

3.2 Treatment of Reorganization.

3.2.1 Transaction Payment. Within five (5) business days after receipt of an Event Notice, pursuant to Section 5.2.3 below, a Majority Interest of the holders of the shares of Series F Preferred Stock may provide the Corporation with written notice of its election to treat the Liquidity Event as a liquidation, dissolution or winding up of the Corporation in which case the Corporation and each holder of shares of Series F Preferred Stock shall require that prior to or concurrent with consideration from any such transaction being paid to the Corporation (if the consideration is to be received by the Corporation in an asset transaction) or by any third party to other shareholders of the Corporation (if the consideration is to be received directly by the shareholders in a merger or stock purchase transaction), a payment (the "Transaction Payment") shall be made to the holders of the shares of Series F Preferred Stock equal to the amount that the holders of shares of Series F Preferred Stock would have received had the entire consideration in the transaction with respect to a Liquidity Event involving the sale of all or substantially all of the assets of the Corporation, net of any liabilities of the Corporation not assumed or otherwise paid by the acquiring entity including, without limitation, taxes, fees and expenses arising in connection with such

transaction, been deemed Available Assets for distribution to the shareholders of the Corporation upon liquidation pursuant to Section 3.1 hereof.

3.2.2 Partial Sale or Transfer. If the Liquidity Event involves the sale or transfer of fewer than all of the shares or assets of the Corporation, the aggregate consideration shall be appropriately increased as if all of the shares or assets had been sold (such amount to be calculated to reflect, in a partial asset sale, the value of assets and liabilities not transferred and in a partial sale of the shares or assets of the Corporation, the value of the shares not transferred, including with respect to the shares of Series F Preferred Stock, their rights and priorities established herein).

3.2.3 Payment of Transaction Payment. Except as provided in the immediately succeeding sentence, the Transaction Payment shall be paid in cash. If securities of the acquiring entity are Issued to the holders of the Corporation's Common Stock in the Liquidity Event (the "Acquiring Stock"), the Transaction Payment shall be paid in such portions of cash and Acquiring Stock as shall be determined by the Majority Interest of the holders of the shares of Series F Preferred Stock, in their sole discretion. The Acquiring Stock utilized to make the Transaction Payment, if any, shall have the same rights, preferences and restrictions (including whether the issuance or sale of such Acquiring Stock is registered or entitled to registration rights under the Securities Act of 1933, as amended), and shall have an equivalent value for purposes of determining the number of shares required to be Issued hereunder, as the Acquiring Stock Issued to the holders of the Corporation's Common Stock in the Liquidity Event. If the Acquiring Stock is valued by the parties to the Liquidity Event, the value so agreed upon shall control for purposes of determining that amount of the entire consideration in the transaction, the Transaction Payment and the payments thereof. If the Acquiring Stock is not so valued, the value determined in good faith by the Board as the fair value of such stock shall control for purposes of determining the amount of the entire

consideration in the transaction, the Transaction Payment and the payment thereof. Upon the payment in full of the Transaction Payment, shares of Series F Preferred Stock shall be deemed retired and no longer outstanding and the holders of shares of Series F Preferred Stock shall not be entitled to any further rights in respect therein.

4. Voting Rights. In addition to the specific voting rights provided herein, each holder of Series F Preferred Stock shall be entitled to vote together with the Common Stock and all other series and classes of stock permitted to vote with the Common Stock on all matters submitted to a vote of the holders of Common Stock (including election of directors) in accordance with the provisions of this Section 4, except with respect to matters in respect of which one or more other classes of capital stock of the Corporation is entitled

to vote as a separate class under the PBCL or the provisions of these Articles of Incorporation. Each holder of Series F Preferred Stock shall be entitled to notice of any shareholders' meeting in accordance with the bylaws of the Corporation at the same time and in the same manner as notice is given to all other shareholders entitled to vote at such meetings. For each vote in which holders of Series F Preferred Stock are entitled to participate, the holder of each share of Series F Preferred Stock shall be entitled to that number of votes per share to which such holder would have been entitled had such share of Series F Preferred Stock then been converted into shares of Common Stock pursuant to the provisions of Section 5.1.1 hereof, at the record date for the determination of those holders entitled to vote on such matters or, if no such record date is established, at the date such vote is taken or any written consent of shareholders is solicited.

5. Conversion. The holders of Series F Preferred Stock shall have the following rights and be subject to the following obligations with respect to the conversion of such shares into shares of Common Stock.

5.1 Right to Convert Series F Preferred Stock.

5.1.1 Subject to and in compliance with the provisions of this Section 5, each share of Series F Preferred Stock may, at the option of the holder thereof, be converted at any time and from time to time into fully-paid and non-assessable shares of Common Stock. The number of shares of Common Stock which a holder of Series F Preferred Stock shall be entitled to receive upon conversion shall be equal to the product obtained by multiplying (i) the number of shares of Series F Preferred Stock being converted at any time by (ii) the rate (the "Conversion Rate") equal to the quotient obtained by dividing the Purchase Price by the Conversion Price. The initial "Conversion Price," subject to adjustment in accordance with this Section 5.1, shall be $2.00.

5.1.2 Such rights of conversion shall be exercised by the holder of Series F Preferred Stock by giving written notice that such holder elects to convert a stated number of shares of Series F Preferred Stock into shares of Common Stock and by surrendering the certificate or certificates for the shares of Series F Preferred Stock to be converted to the Corporation at its principal office (or such other office or agency of the Corporation as the Corporation may designate by notice in writing to the holders of shares of Series F Preferred Stock) at any time during its usual business hours on the date set forth in such notice, together with a statement of the name or names (with address) in which the certificate or certificates for the shares of Common Stock shall be Issued.

5.2 Anti-Dilution Adjustments.

5.2.1 Adjustment of Price Upon Issuance of Shares of Common Stock. Except as provided in Section 5.2.2 while there are any shares of Series F Preferred Stock outstanding, if and whenever the Corporation shall Issue, or is, in accordance with Sections 5.2.1(1) through 5.2.1(7) below, deemed to have Issued, any shares of Common Stock for no consideration or a

consideration per share less than the Conversion Price in effect immediately prior to the time of such Issuance or, as to Common Stock Equivalents, Net Consideration Per Share less than the Conversion Price in effect immediately prior to the time of such Issuance, then, forthwith upon

such Issue or sale, the Conversion Price shall be reduced to the price determined by multiplying such Conversion Price by the following fraction:

$$\frac{N(0) + N(1)}{N(0) + N(2)}$$

Where:

N(0) = the number of shares of Common Stock outstanding immediately prior to the Issuance of such additional shares of Common Stock or Common Stock Equivalents (calculated on a Fully-Diluted Basis (as defined below)).

N(1) = the number of shares of Common Stock which the aggregate consideration, if any, (including the Net Consideration Per Share with respect to the issuance of Common Stock Equivalents) received or receivable by the Corporation for the total number of such additional shares of Common Stock so Issued or deemed to be Issued would purchase at the Conversion Price in effect immediately prior to such issuance.

N(2) = the number of such additional shares of Common Stock so Issued or deemed to be Issued.

The provisions of this Section 5.2.1 may be waived as to all shares of Series F Preferred Stock in any instance upon the written agreement of the holders of a Majority Interest of the outstanding shares of Series F Preferred Stock.

For purposes of this Section 5.2.1, the following Sections 5.2.1(1)to 5.2.1(7)shall also be applicable:

(1) Issuance of Common Stock Equivalent, Expiration of Common Stock Equivalents. For the purposes of this Section 5.2.1(1), the Issuance of any Common Stock Equivalents shall be deemed an Issuance of shares of Common Stock. Any obligation, agreement or undertaking to Issue Common Stock Equivalent at any time in the future shall be deemed to be an Issuance of shares of Common Stock at the time such obligation, agreement or undertaking is made or arises. If, as, and when such Common Stock Equivalent expires or is canceled without being exercised, the Conversion Price effective immediately upon such cancellation or expiration shall be equal to the Conversion Price that would have been in effect (a) had the expired or canceled Common Stock Equivalent not been Issued, and (b) had the adjustments made to the Conversion Price since the

date of Issuance of such Common Stock Equivalent been made to the Conversion Price which would have been in effect had the expired or canceled Common Stock Equivalent not been Issued.

(2) Change in Net Consideration Per Share of Common Stock Equivalents. Should the Net Consideration Per Share of any such Common Stock Equivalents be decreased from time to time other than as a result of the application of anti-dilution provisions substantially similar to the provisions of this Section 5.2, then, commencing upon, and with respect to, a conversion occurring after the effectiveness of each such change, the Conversion Price will be that which would have been obtained (a) had the adjustments made pursuant to Section 5.2.1 upon the Issuance of such Common Stock Equivalents been made upon the basis of the new Net Consideration Per Share of such securities, and (b) had the adjustments made to the Conversion Price since the date of issuance of such Common Stock Equivalent been made to such Conversion Price as adjusted pursuant to clause (a) above.

(3) Net Consideration Per Share. The "Net Consideration Per Share" which shall be receivable by the Corporation for any shares of Common Stock Issued upon the exercise or conversion of any Common Stock Equivalents shall mean the amount equal to the total amount of consideration, if any, received by the Corporation for the issuance of such Common Stock Equivalents, plus the amount of consideration, if any, payable to the Corporation upon exercise or conversion thereof, divided by the aggregate number of shares of Common Stock that would be used if such Common Stock Equivalents were exercised, exchanged or converted assuming satisfaction of all vesting or similar requirements and achievements of all thresholds or other criteria which would increase the number of shares of Common Stock ultimately issuable upon exercise, exchange or conversion..

(4) Allocations. In case the Corporation shall make any allocation or other distribution upon any share of the Corporation payable in shares of Common Stock (except for allocations or distributions upon the shares of Common Stock or the shares of Series F Preferred Stock) or Common Stock Equivalent, any shares of Common Stock or Common Stock Equivalents, as the case may be, Issuable in payment of such allocation or distribution shall be deemed to have been Issued or sold for a consideration of $.001.

(5) Consideration for Shares. In case any shares of Common Stock or Common Stock Equivalents shall be Issued or sold for cash, the consideration received therefor shall be deemed to be the amount received by the Corporation therefor, without deduction therefrom of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Corporation in connection therewith. In case any shares of Common Stock or Common Stock Equivalents shall be Issued or sold for a consideration other than cash, the amount of the consideration other than cash received by the Corporation shall be deemed to be the fair value of such consideration as determined in good faith by the Board, without deduction of any expenses incurred or any underwriting

commissions or concessions paid or allowed by the Corporation in connection therewith. In case Common Stock Equivalent shall be Issued in connection with the Issue and sale of other securities of the Corporation, together comprising one integral transaction in which no special consideration is allocated to such Common Stock Equivalents by the parties thereto, such Common Stock Equivalents shall be deemed to have been Issued for such consideration as determined in good faith by the Board.

(6) Record Date. In case the Corporation shall establish a record date with respect to the holders of its shares of Common Stock for the purpose of entitling them (i) to receive an allocation or other distribution payable in shares of Common Stock or Common Stock Equivalents or (ii) to subscribe for or purchase shares of Common Stock or Common Stock Equivalents, then such record date shall be deemed to be the date of the Issuance of the shares of Common Stock deemed to have been Issued upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.

(7) Exceptions to Anti-Dilution Adjustments; Basket for Reserved Employee Shares. The anti-dilution adjustments set forth in this Section 5.2.1 shall not apply under any of the circumstances contemplated in Section 5.2.2 hereof. Further, this Section 5.2.1 shall not apply with respect to the (i) Issuance or sale of Common Stock or Common Stock Equivalents to purchase or otherwise obtain shares of Common Stock, to directors, employees and consultants of the Corporation or any Subsidiary pursuant to any qualified or non-qualified option plan or agreement, purchase plan or agreement, restriction agreement, employee ownership plan, consulting agreement, or such other options, Issuances, arrangements, agreements, or plans intended principally as a means of providing compensation for employment or services provided that in each such case such plan, agreement, or other arrangement or Issuance is approved by the Board, (ii) conversion or exercise of currently outstanding convertible or exercisable securities or other Common Stock Equivalents Issued on the date of original Issuance of the shares of Series F Preferred Stock, (iii) the Issuance of any shares which are Issued pursuant to the exercise or conversion of any Common Stock Equivalents, or (iv) 3,000,000 shares of Common Stock to be issued

pursuant to the Asset Purchase Agreement, dated February 13, 2001, by and among the Corporation, Axial Technology Holding AG and Wyzdom Solutions, Inc..

5.2.2 Adjustment Upon Extraordinary Common Stock Event. Upon the happening of an Extraordinary Common Stock Event (as hereinafter defined), the Conversion Price of each share of Series F Preferred Stock shall, simultaneously with the happening of such Extraordinary Common Stock Event, be adjusted by multiplying such Conversion Price by a fraction, the numerator of which shall be the shares of Common Stock outstanding immediately prior to such Extraordinary Common Stock Event and the denominator of which shall be the

number of shares of Common Stock outstanding immediately after such Extraordinary Common Stock Event, and the product so obtained shall thereafter be the Conversion Price of the Series F Preferred Stock, which, as so adjusted, shall be readjusted in the same manner upon the happening of any successive Extraordinary Common Stock Event or Events. An "Extraordinary Common Stock Event" shall mean (i) the issue of additional shares of Common Stock as a dividend or other distribution on outstanding shares of Common Stock, (ii) a subdivision of outstanding shares of Common Stock, or (iii) a combination or reverse stock split of outstanding shares of Common Stock into a smaller number of shares of Common Stock.

5.2.3 Liquidity Event; Reorganization or Reclassification. At least ten (10) business days prior to the consummation of a Liquidity Event, reorganization or reclassification of the shares of the Corporation, the Corporation and the other holders of shares to the extent a party to such event shall provide the holders of the shares of Series F Preferred Stock written notice of such event (the "Event Notice"). If any Liquidity Event, capital reorganization or reclassification of the shares of the Corporation shall be effected in such a way that holders of shares of Common Stock shall be entitled to receive shares, securities or assets with respect to or in exchange for shares of Common Stock, then, as a condition of such Liquidity Event, reorganization or reclassification, lawful and adequate provisions shall be made whereby each holder of shares of Series F Preferred Stock shall thereupon have the right to receive, upon the basis and upon the terms and conditions specified herein and in lieu of the shares of Common Stock immediately theretofore receivable upon the conversion of such shares of Series F Preferred Stock, such shares, securities or assets as may be Issued or payable with respect to or in exchange for a number of outstanding shares of Common Stock equal to the number of shares of Common Stock immediately theretofore receivable upon such conversion had such Liquidity Event, reorganization or reclassification not taken place, and in any such case appropriate provisions shall be made with respect to the rights and interests of such holder to the end that the provisions hereof (including, without limitation, provisions for adjustments of the Conversion Price) shall thereafter be applicable, as nearly as may be, in relation to any shares, securities or assets thereafter deliverable upon the exercise of such conversion rights. In the case of a transaction to which both this Section 5.2.3 and Section 3.2 hereof apply, the Majority Interest of the outstanding shares of Series F Preferred Stock shall have the option to elect treatment for the shares of Series F Preferred Stock under either this Section 5.2.3 or under Section 3.2.1, notice of which election shall be submitted in writing to the Corporation at its principal office no later than five (5) business days after receipt of the Event Notice.

5.2.4 Notice of Adjustment. Upon any adjustment of the Conversion Price, then in each such case the Corporation shall give written notice thereof, by delivery in person, certified or registered mail, return receipt requested, telecopier, or telex, addressed to each holder of shares of Series F Preferred Stock at the address of such holder as shown on the books of the Corporation, which notice shall state the Conversion Price resulting from such adjustment, setting forth in reasonable detail the method upon which such calculation is based.

5.2.5 Issue Tax. The issuance of certificates for shares of Common Stock upon conversion of shares of Series F Preferred Stock shall be made without charge to the holders thereof for any issuance tax in respect thereof, provided that the Corporation shall not be required to pay any tax that may be payable in respect of any transfer involved in the issuance and delivery of any certificate in a name other than that of the holder of the shares of Series F Preferred Stock which is being converted.

5.2.6 Closing of Books. The Corporation will at no time close its transfer books against the transfer of any shares of Series F Preferred Stock or of any shares of Common Stock Issued or Issuable upon the conversion of any shares of Series F Preferred Stock in any manner which interferes with the timely conversion of such shares of Series F Preferred Stock, except as may otherwise be required to comply with applicable securities or tax laws.

5.2.7 Fractional Shares; Distributions; Partial Conversion. No fractional shares of Common Stock shall be Issued upon conversion of shares of Series F Preferred Stock into shares of Common Stock and no payment or adjustment shall be made upon any conversion on account of any cash distributions on the shares of Common Stock Issued upon such conversion. In case the number of shares of Series F Preferred Stock represented by the certificate or certificates surrendered pursuant to Section 5.1 exceeds the number of shares of Series F Preferred Stock converted, the Corporation shall, upon such conversion, execute and deliver to the holder, at the expense of the Corporation, a new certificate or certificates for the number of shares of Series F Preferred Stock represented by the certificate or certificates surrendered that are not to be converted. If any fractional shares of Common Stock would, except for the provisions of the first sentence of this Section 5.2.7, be delivered upon such conversion, the Corporation, in lieu of delivering such fractional share, shall pay to the holder surrendering the shares of Series F Preferred Stock for conversion an amount in cash equal to the current market price of such fractional share as determined in good faith by the Board of the Corporation.

5.3 Conversion Issuance Limit - Prohibition. Notwithstanding anything to the contrary herein, in no event shall the Conversion Price be reduced to an amount such that the number of shares of Common Stock thereafter issuable upon conversion of the Series F Preferred Stock (together with any shares of Common Stock previously issued pursuant to the conversion of shares of Series F Preferred Stock) would be equal to or greater than 3,281,110 shares of Common Stock (as adjusted for any stock splits, stock dividends or other recapitalizations) (the "Conversion Issuance Limit"), unless the Nasdaq marketplace rules (Rule 4300 and 4400 Series) then in effect (i) would permit such an issuance in excess of the Conversion Issuance Limit to occur, or (ii) would permit such an issuance in excess of the Conversion Issuance Limit to

occur upon receipt of the approval of the Corporation's shareholders, and such approval is obtained.

5.4 Conversion Issuance Limit - Consent. If the Corporation at any time or from time to time desires to Issue (or in accordance with Sections 5.2.1(1) through 5.2.1(7) above would if such transaction were contemplated, be deemed to have Issued) any shares of Common or Common Stock Equivalents as a result of which the Conversion Price would, but for Section 5.3 above, be reduced to an amount such that the number of shares of Common Stock thereafter issuable upon conversion of the Series F Preferred Stock (together with any shares of Common Stock previously issued pursuant to the conversion of shares of Series F Preferred Stock) would be equal to or greater than the Conversion Issuance Limit, then the Corporation shall first give written notice thereof to the holders of the Series F Preferred Stock, and request that such holders consent to any such Issue (or deemed Issue) (the "Issuance Notice"). In the event that a Majority Interest of the holders of the Series F Preferred Stock shall give such consent to Corporation in writing within five (5) business days of the holders of the Series F Preferred Stock's receipt of the Issuance Notice, and the Corporation shall consummate such Issue, then the all accrued but unpaid dividends on the Series F Preferred Stock as of the date thereof shall be immediately declared and paid to the holders of the Series F Preferred Stock and all subsequent dividends on the Series F Preferred Stock shall be declared and paid in cash semi-annually (on each six and twelve month anniversary from the date of issuance) to the holders of the Series F Preferred Stock. In the event that a Majority Interest of the holders of the Series F Preferred Stock do not so consent within such five (5) business day period above, then the Corporation may not consummate such Issue. All notices in this Section 5.4 shall be hand-delivered or delivered by nationally recognized overnight courier.

6. RESTRICTIONS AND LIMITATIONS ON CORPORATE ACTION. As long as any of the shares of Series F Preferred Stock are outstanding, the holders of Series F Preferred Stock shall vote as a separate voting group on, and the affirmative vote of the Majority Interest of the holders of the Series F Preferred Stock then outstanding (whether by written consent or by a duly called meeting) shall be required to authorize, any action by the Corporation or its Subsidiaries which would:

6.1 in any manner (A) authorize, create, amend or Issue any class or series of capital stock ranking, either as to payment of dividends, distribution of assets upon liquidation or otherwise, or redemption, prior to or on parity with the Series F Preferred Stock or (B) authorize, create, amend or Issue any shares of any class or series or any bonds, debentures, notes or other obligations convertible into or exchangeable for, or having optional rights to purchase, any shares having any such priority or on parity with the Series F Preferred Stock;

6.2 in any manner alter or change the designation or the

powers, preferences or rights or the qualifications, limitations or restrictions of the Series F Preferred Stock;

6.3 reclassify shares of Common Stock, or any other shares of any class or series of capital stock hereinafter created junior to the Series F Preferred Stock into shares of any class or series of capital stock ranking, either as to payment of dividends, distribution of assets upon liquidation or otherwise, or redemption, prior to or on a parity with the Series F Preferred Stock;

6.4 increase the authorized number of shares of Series F Preferred Stock, issue additional shares of Series F Preferred Stock or authorize any other class or series of capital stock of the Corporation or its Subsidiaries;

6.5 result in any material change in the nature of the business engaged in by the Corporation;

6.6 create, authorize, reserve or involve the issuance of shares of Common Stock which in the aggregate exceeds 3,323,700 in connection with Common Stock Equivalents hereafter issued to officers, employees, directors or consultants of the Corporation pursuant to any plan, agreement or other arrangements, including without limitation, options granted pursuant to the Corporation's 1998 Stock Option Plan, the Corporation's Stock Option Plan for Directors and the Corporation's 1997 Equity Compensation Plan adopted by the Corporation on May 21, 1997 each as amended or restated from time to time;

6.7 result in the redemption, repurchase or other acquisition by the Corporation of capital stock or other securities of the Corporation or its Subsidiaries, except for (i) redemption of the Series F Preferred Stock as set forth in these Articles of Incorporation and (ii) repurchases or other acquisitions of capital stock of the Corporation at a purchase price not in excess of the original purchase price of such capital stock, from employees of the Corporation upon such employees' termination of employment from the Corporation pursuant to the terms and conditions of agreements which provide the Corporation the right to repurchase such capital stock upon such termination of employment;

6.8 result in (i) any liquidation, dissolution, winding-up or similar transaction of the Corporation or its Subsidiaries, (ii) a sale of all or substantially all of the assets of the Corporation or its Subsidiaries or a merger, consolidation, sale of capital stock or other transaction in which the holders of capital stock of the Corporation and its Subsidiaries, in the aggregate, immediately prior to such transaction will hold, immediately after such transaction, less than 50% of the aggregate voting power of outstanding capital stock of the surviving company, or (iii) any acquisition by the Corporation or its Subsidiaries of another corporation or other business entity, or the assets thereof, in which the aggregate consideration paid, or to be paid, by the Corporation equals or exceeds

$10,000,000 (including, without limitation, all assumed debt, all cash payments, and the fair market value of all securities or other property issued as consideration);

6.9 result in the creation of indebtedness of the Corporation or its Subsidiaries, including, without limitation, any loan agreement, promissory note (or other evidence of indebtedness), mortgage, security agreement or lease, such that after such transaction the aggregate indebtedness of the Corporation and its Subsidiaries to all parties would exceed $3,500,000 (other than indebtedness relating to that certain lease under the Master Equipment Lease Agreement dated July 23, 1997 by and between the Corporation and Triangle Technology Leasing); or

6.10 that would in any way amend, alter, restate or otherwise change these Articles of Incorporation or the Bylaws of the Corporation, or the organizational documents of the Corporation's Subsidiaries.

7. Redemption.

7.1 Commencing at any time on or after February 20, 2003, upon at least 30 days prior written notice by the Corporation to the holders of the Series F Preferred Stock (the "Redemption Notice"), the Corporation may, to the extent it may lawfully do so, redeem all of the shares of Series F Preferred Stock as of the date set forth in the Redemption Notice (the "Redemption Date"), by paying in cash therefor on such Redemption Date a sum per share equal to one hundred three percent (103%) of the Purchase Price (as appropriately adjusted for splits, combinations, dividends or similar transactions) plus all accrued but unpaid dividends on the Series F Preferred Stock (the total amount of such payment is hereafter referred to collectively, as the "Redemption Price").

7.2 Except as provided herein, on or after the Redemption Date, the holders of the Series F Preferred Stock shall surrender to the Corporation the certificate or certificates representing such shares and thereupon the Redemption Price of such shares shall be immediately payable and shall be immediately paid to the order of the person whose name appears on such certificate or certificates as the owner thereof and each surrendered certificate shall be canceled.

7.3 From and after the Redemption Date, unless there shall have been a default in payment of the Redemption Price, all rights of the holders of shares of Series F Preferred Stock (except the right to receive the Redemption Price without interest upon surrender of their certificate or certificates) shall cease with respect to such shares at such time, and such shares shall not thereafter be transferred on the books of the Corporation or be deemed to be outstanding for any purpose whatsoever.

8. No Dilution or Impairment. The Corporation will not, by amendment of its Articles of Incorporation or through any reorganization, transfer of capital stock or assets, consolidation, merger, dissolution, Issue or sale of securities

or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of the Series F Preferred Stock set forth herein, but will at all times in good faith assist in the carrying out of all such terms. Without limiting the generality of the foregoing, the Corporation (a) will not increase the par value of any shares of stock receivable on the conversion of the Series F Preferred Stock above the Purchase Price, and (b) will take such action as may be necessary or appropriate in order that the Corporation may validly and legally Issue fully-paid and nonassessable shares of stock on the conversion of all Series F Preferred Stock from time to time outstanding.

9. Notices of Record Date. In the event of (a) any taking by the Corporation of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividends or other distribution, or any right to subscribe for, purchase or otherwise acquire any shares of capital stock of any class or any other securities or property, or to receive any other right; (b) any capital reorganization of

the Corporation, any reclassification or recapitalization of the capital stock of the Corporation, any merger or consolidation of the Corporation, or any transfer of all or substantially all of the assets of the Corporation to any other corporation, or any other entity or person; or (c) any voluntary or involuntary dissolution, liquidation or winding up of the Corporation; then and in each such event the Corporation shall mail or cause to be mailed to each holder of Series F Preferred Stock a notice specifying (i) the date on which any such record is to be taken for the purpose of such dividend, distribution or right and a description of such dividend, distribution or right, (ii) the date on which any such reorganization, reclassification, recapitalization, transfer, consolidation, merger, dissolution, liquidation or winding up is expected to become effective, and (iii) the time, if any, that is to be fixed, as to when the holders of record of Common Stock (or other securities) shall be entitled to exchange their shares of Common Stock (or other securities) for securities or other property deliverable upon such reorganization, reclassification, recapitalization, transfer, consolidation, merger, dissolution, liquidation or winding up. Such notice shall be mailed by first class mail, postage prepaid, at least fifteen (15) days prior to the date specified in such notice on which action is being taken.

10. Status of Converted or Repurchased Series F Preferred Stock. Any share or shares of Series F Preferred Stock acquired by the Corporation by reason of redemption, purchase, conversion or otherwise shall be returned to the status of authorized but unissued shares of undesignated Series F Preferred Stock, and may only be reissued in compliance with the provisions of these Articles of Incorporation. Upon the cancellation of all outstanding shares of Series F Preferred Stock, the provisions of the designation of Series F Preferred Stock shall terminate and have no further force and effect.

11. Definitions. For purposes of these Articles of Incorporation, the following terms used herein shall have the meanings ascribed below:

"Acquiring Stock" shall have the meaning set forth in Section 3.2.3 hereof.

"Affiliates" shall mean any person that is an "affiliate" as defined in Rule 12b-2 of the General Rules and Regulations under the Securities Exchange Act of 1934, as amended, but with respect to Safeguard, neither the Corporation nor any of its directors and officers, in such capacities, shall be considered affiliates of Safeguard hereunder.

"Available Assets" shall have the meaning as set forth in Section 3.1.1

"Board" shall have the meaning set forth in introductory paragraph of these Articles of Incorporation.

"Common Stock" shall have the meaning set forth in Section 2.3 hereof.

"Common Stock Equivalents" shall mean warrants, options, subscription or other rights to purchase or otherwise obtain Common Stock and the Issuance of any securities or other rights convertible into or exchangeable for Common Stock and the Issuance of any warrants, options, subscription or other rights to purchase or otherwise obtain such convertible or exchangeable securities.

"Conversion Price" shall have the meaning as set forth Section 5.1.1 hereof.

"Conversion Rate" shall have the meaning as set forth in Section 5.1.1 hereof.

"Corporation" shall mean Tangram Enterprise Solutions, Inc., a Pennsylvania corporation.

"Event Notice" shall have the meaning as set forth in Section 5.2.3 hereof.

"Extraordinary Common Stock Event" shall have the meaning as set forth in Section 5.2.2 hereof.

"Fully Diluted Basis" shall mean as to any class of capital stock the number of shares of such class of capital stock which would then be outstanding, assuming the exercise or conversion of all then exercisable or convertible Common Stock Equivalents which, directly or indirectly, on exercise,

exchange or conversion result in the issuance of shares of such class of capital stock, assuming in each instance that the holder thereof receives the maximum number of shares of capital stock or securities issuable, directly or indirectly, under the terms of the respective instrument, assuming satisfaction of all vesting or similar requirements and achievements of all thresholds or other criteria which would increase the amount of capital stock ultimately issuable upon exercise or conversion.

"Issue" in any of its forms, for the purposes of these Articles of Incorporation shall mean to sell, grant or otherwise issue in any manner or any agreement or commitment to do any of the foregoing.

"Junior Stock" shall have the meaning as set forth in Section 3.1.1 hereof.

"Liquidity Event" shall mean any acquisition of all or substantially all of the assets of the Corporation, or transaction or series of transactions involving the Corporation, or its securities, whether by consolidation, merger, purchase of shares of capital stock or other reorganization or combination or otherwise, in which the holders of the Corporation's outstanding shares of capital stock immediately prior to such transaction own, immediately after such transaction, securities representing less than fifty percent (50%) of the voting power of the entity surviving such transaction.

"Liquidation Preference" shall have the meaning as set forth in Section 3.1.1

"Majority Interest" shall mean, with respect to a particular class of capital stock entitled to vote on a particular matter, the votes of such class of capital stock representing greater than fifty percent (50%) of the total number of votes eligible to be cast on the matter being voted on.

"Net Consideration Per Share" shall have the meaning as set forth in Section 5.2.1(3) hereof.

"PBCL" shall have the meaning as set forth in the introductory paragraph of these Articles of Incorporation.

"Preferred Stock" shall have the meaning as set forth in the introductory paragraph of these Articles of Incorporation.

"Purchase Price" shall have the meaning set forth in Section 1 hereof.

"Redemption Date" shall have the meaning as set forth in Section 7.1 hereof.

"Redemption Notice" shall have the meaning as set forth in Section 7.1 hereof.

"Redemption Price" shall have the meaning as set forth in Section 7.1 hereof.

"Safeguard" shall mean Safeguard Scientifics, Inc., a Pennsylvania corporation, and/or any Affiliate.

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"Series F Preferred Stock" shall have the meaning set forth in Section 1 hereof.

"Subsidiary" and "Subsidiaries" shall have the meaning as set forth in Section 2.4 hereof.

"Transaction Payment" shall have the meaning as set forth in Section 3.2.1 hereof.

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EXHIBIT C

NOTE AMENDMENT

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FIRST AMENDMENT TO SECOND AMENDED REVOLVING NOTE

THIS FIRST AMENDMENT TO SECOND AMENDED REVOLVING NOTE ("Amendment") is dated this 20th day of February, 2001, by and between Tangram Enterprise Solutions, Inc., a Pennsylvania corporation (the "Debtor") and Safeguard Scientifics, Inc., a Pennsylvania corporation (the "Holder").

RECITALS

WHEREAS, pursuant to that certain Securities Conversion Agreement dated as of the date hereof, between the Debtor and the Holder, the Holder is converting $3,000,000 of the aggregate amount of principal outstanding under that certain Second Amended Revolving Note dated September 11, 1997 issued by the Company in favor of the Investor (the "Revolver Note") into 3,000 shares of Series F Convertible Preferred Stock (the "Conversion");

WHEREAS, in connection with the Conversion, the Debtor and the Holder desire to amend the Revolver Note to reduce the principal amount available

thereunder from Six Million Dollars ($6,000,000) to Three Million Dollars ($3,000,000).

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound, the parties hereto agree as follows:

1. The first paragraph of the Revolver Note is hereby amended in its entirety to read as follows:

> FOR VALUE RECEIVED, Tangram Enterprise Solutions, Inc., a Pennsylvania corporation (the "Borrower"), having an office at 11000 Regency Parkway, Suite 401, Cary, North Carolina 27511-8504, hereby promises to pay to the order of Safeguard Scientifics, Inc., a Delaware corporation (the "Lender") or its registered assigns, at the Lender's office located at 435 Devon Park Drive, Wayne, Pennsylvania 19087 or at such other place in the continental United States as the Lender may designate in writing, upon demand, in lawful money of the United States, and in immediately available funds, the principal sum of up to Three Million and no/100 Dollars ($3,000,000), or so much thereof as shall have been advanced by the Lender to the Borrower as hereinafter set forth and then be outstanding, and to pay interest thereon monthly in arrears on the first business day of each calendar month at an annual rate equal to the announced prime rate of PNC Bank, N.A. of Philadelphia, Pennsylvania (the "Prime Rate") plus one percent (1%). All amounts advanced hereon, but not to exceed $3,000,000 at any one time outstanding in the aggregate,

> shall be so advanced upon the request of the Borrower. All amounts so advanced hereon and all payments made on account of the principal hereof shall be recorded in the books of the Lender, which records shall be final and binding, but failure to do so shall not release the Borrower from any of its obligations hereunder.

2. Except as modified by this Amendment, the Revolver Note shall remain in full force and effect in accordance with it terms. In the event of any inconsistencies between the Revolver Note and this Amendment, this Amendment shall prevail.

3. The parties hereby acknowledge that the principal outstanding under the Revolver Note as of the date hereof, after giving effect to the Conversion, is $500,000.

4. The parties hereby acknowledge that the accrued but unpaid interest outstanding under the Revolver Note as of the date hereof, after giving effect to the Conversion, is $81,867.38.

5. This Amendment shall be governed in all respects by the laws of the Commonwealth of Pennsylvania without regard to the conflicts of laws principals of any jurisdiction.

6. This Amendment and any amendment or supplement hereto may be executed by the parties in separate counterparts, whether originally or by facsimile, each of which when so executed and delivered, shall be an original, but all such counterparts shall together constitute one and the same agreement.

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IN WITNESS WHEREOF, the parties have executed this Amendment as of the day and year first above written.

DEBTOR

TANGRAM ENTERPRISE SOLUTIONS, INC.

By: _____
John Nelli, Senior Vice President
and Chief Financial Officer

HOLDER

SAFEGUARD SCIENTIFICS, INC.

By: _____

EXECUTION ORIGINAL

EXHIBIT 2

TANGRAM ENTERPRISE SOLUTIONS, INC.

INVESTOR RIGHTS AGREEMENT

THIS INVESTOR RIGHTS AGREEMENT (the "Agreement") is entered into as of February 20, 2001, by Tangram Enterprise Solutions, Inc., a Pennsylvania corporation (the "Company") and Safeguard Scientifics, Inc., a Pennsylvania corporation (the "Investor").

RECITALS

WHEREAS, pursuant to that certain Securities Conversion Agreement (the "Conversion Agreement") dated as of the date hereof, between the Investor and the Company, the Investor is converting $3,000,000 of the aggregate amount of principal outstanding under that certain Second Amended Revolving Note dated September 11, 1997 issued by the Company in favor of the Investor (the "Existing Note") into 3,000 shares of Series F Convertible Preferred Stock (the "Series F Preferred Stock"), and the Company and the Investor are amending the Existing Note to reduce the amount available thereunder (the "Note Amendment"); and

WHEREAS, as a condition of entering into the Conversion Agreement, the Investor has requested that the Company enter into this Agreement.

NOW, THEREFORE, in consideration of the mutual promises, representations, warranties, covenants and conditions set forth in this Agreement and in the Conversion Agreement, the parties mutually agree as follows:

SECTION 1. GENERAL

1.1 DEFINITIONS. As used in this Agreement the following terms shall have the following respective meanings:

"AFFILIATE" shall mean any person who is an "affiliate" as defined in Rule 12b-2 of the General Rules and Regulations under the Exchange Act, but with respect to the Investor, the Company nor any of its directors and officers, in such capacities, shall not be considered affiliates hereunder.

"CONVERSION SHARES" means shares of Common Stock into which shares of Series F Preferred Stock are converted.

"COMMON STOCK" means shares of the Company's Common Stock, par value $.01 per share.

"DESIGNATIONS" shall mean the Statement of Designations, Preferences and Rights of the Company's Series F Convertible Preferred Stock filed with the Department of State of the Commonwealth of Pennsylvania on or before the date hereof.

"EXCHANGE ACT" means the Securities Exchange Act of 1934, as amended, and any rules or regulations promulgated thereunder.

"FORM S-3" means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC which permits inclusion or incorporation of substantial information by reference to other documents filed by the Company with the SEC.

"HOLDER" means any person owning of record Registrable Securities that have not been sold to the public or any assignee of record of such Registrable Securities in accordance with Section 2.10 hereof.

"PERSON" shall mean any individual, corporation, partnership, firm, joint venture, association, limited liability company, limited liability partnership, joint-stock company, trust, unincorporated organization or governmental entity.

"REGISTER," "REGISTERED," and "REGISTRATION" refer to a registration effected by preparing and filing a registration statement in compliance with the Securities Act, and the declaration or ordering of effectiveness of such registration statement or document.

"REGISTRABLE SECURITIES" means (a) Common Stock of the Company issued or issuable upon conversion of the Shares and (b) any Common Stock of the Company issued as (or issuable upon the conversion or exercise of any warrant, right or other security which is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, such above-described securities. Notwithstanding the foregoing, Registrable Securities shall not include any securities sold by a person to the public either pursuant to a registration statement declared effective pursuant to the Securities Act or Rule 144 or sold in a private transaction in which the transferor's rights under Section 2 of this Agreement are not assigned.

"REGISTRABLE SECURITIES THEN OUTSTANDING" shall be the number of shares determined by calculating the total number of shares of the Company's Common Stock that are Registrable Securities and either (a) are then issued and outstanding or (b) are issuable pursuant to then exercisable or convertible

securities.

"REGISTRATION EXPENSES" shall mean all expenses incurred by the Company in complying with Sections 2.2, 2.3 and 2.4 hereof, including, without limitation, all registration and filing fees, printing expenses, fees and disbursements of counsel for the Company, blue sky fees and expenses and the expense of any special audits incident to or required by any such registration (but excluding the compensation of regular employees of the Company which shall be paid in any event by the Company).

"RULE 144" shall mean Rule 144 promulgated under the Securities Act.

"SAFEGUARD" shall mean Safeguard Scientifics, Inc., a Pennsylvania corporation.

"SEC" or "COMMISSION" means the United States Securities and Exchange Commission.

"SECURITIES ACT" shall mean the Securities Act of 1933, as amended, and any rules or regulations promulgated thereunder.

"SELLING EXPENSES" shall mean all underwriting discounts and selling commissions applicable to the sale.

"SHARES" shall mean the shares of the Company's Series F Preferred Stock issued pursuant to the Conversion Agreement and held by the Investor and its permitted assigns.

"SUBSIDIARIES" shall mean with respect to any Person (including the Company), any corporation, partnership, limited liability company, association or other business entity of which is controlled by (as defined in Rule 405 of the General Rules and Regulations under the Securities Act) such Person, by one or more Subsidiaries of such Person or by such Person and one or more Subsidiaries of such Person.

SECTION 2. REGISTRATION; RESTRICTIONS ON TRANSFER

2.1 RESTRICTIONS ON TRANSFER.

(a) Each Holder agrees not to make any disposition of all or any portion of the Shares or the Registrable Securities unless and until:

(i) There is then in effect a registration statement under the Securities Act covering such proposed disposition and such disposition is made

in accordance with such registration statement; or

(ii) (A) Such Holder shall have notified the Company of the proposed disposition and shall have furnished the Company with a detailed statement of the circumstances surrounding the proposed disposition and (B) if reasonably requested by the Company, such Holder shall have furnished the Company with an opinion of counsel, reasonably satisfactory to the Company, that such disposition will not require registration of such shares under the Securities Act. Notwithstanding anything herein to the contrary, it is agreed that the Company will not require opinions of counsel for transactions made pursuant to Rule 144 unless, after consultation with the Holder, the Company has a reasonable basis for believing that such disposition may not be made pursuant to Rule 144.

(iii) Notwithstanding the provisions of paragraphs (i) and (ii) above, no such registration statement or opinion of counsel shall be necessary for a transfer by a Holder which is (A) a partnership, to its partners or former partners in accordance with partnership interests, (B) a corporation, to its shareholders in accordance with their interest in the

corporation, (C) a limited liability company, to its members or former members in accordance with their interest in the limited liability company, (D) natural person, to such Holder's family member or trust for the benefit of such Holder or such Holder's family member; provided that in each case the transferee will be subject to the terms of this Agreement to the same extent as if he were an original Holder hereunder.

(b) Each certificate representing Shares or Registrable Securities shall (unless otherwise permitted by the provisions of this Agreement) be stamped or otherwise imprinted with a legend substantially similar to the following (in addition to any legend required under applicable state securities laws):

> THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, ASSIGNED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR UNLESS THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY AND ITS COUNSEL THAT SUCH REGISTRATION IS NOT REQUIRED.

(c) The Company shall be obligated to reissue promptly unlegended certificates at the request of any holder thereof if the holder shall have obtained an opinion of counsel (which counsel may be counsel to the Company) reasonably acceptable to the Company to the effect that the securities proposed to be disposed of may lawfully be so disposed of without registration,

qualification or legend.

(d) Any legend endorsed on an instrument pursuant to applicable state securities laws and the stop-transfer instructions with respect to such securities shall be removed upon receipt by the Company of an order of the appropriate blue sky authority authorizing such removal.

2.2 DEMAND REGISTRATION.

(a) Subject to the conditions of this Section 2.2, if the Company shall receive a written request from the holders of the Registrable Securities (the "Initiating Holders") that the Company file a registration statement under the Securities Act covering the registration of Registrable Securities owned by such Holder and its Affiliates, then the Company shall, within fifteen (15) days after the receipt thereof, give written notice of such request to all Holders, and subject to the limitations of this Section 2.2, use its best efforts to effect, as soon as practicable, the registration under the Securities Act of all Registrable Securities that the Initiating Holders requests to be registered and all Registrable Securities owned by any other Holder which notifies the Company in writing, within fifteen (15) days after receipt of the Company's notice contemplated by this paragraph, that it intends to participate in the demand registration contemplated herein (such notification to include the number of Registrable Securities sought to be included and the intended method or methods of distribution for such Registrable Securities),

subject to and in accordance with the terms, conditions, procedures and limitations contained in this Agreement.

(b) If the Initiating Holders intend to distribute the Registrable Securities covered by its request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to this Section 2.2, or any request pursuant to Section 2.4, and the Company shall include such information in the written notice referred to in Section 2.2(a) or Section 2.4(a), as applicable. In such event, the right of any Holder to include its Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall enter into an underwriting agreement in customary form with the underwriter or underwriters selected by a majority in interest of the Initiating Holders). Notwithstanding any other provision of this Section 2.2 or Section 2.4, if the underwriter advises the Company that marketing factors require a limitation of the number of securities to be underwritten (including Registrable Securities) then the Company shall so advise all Holders of Registrable Securities which would otherwise be underwritten pursuant hereto, and the number of Registrable

Securities that may be included in the underwriting shall be allocated first among the Holders on a pro rata basis based on the number of Registrable Securities held by all such Holders (including the Initiating Holders) and then second to any other shareholders of the Company (other than the Holders) on a pro rata basis. The number of shares of Registrable Securities to be included in any underwriting and registration covered by this Section 2.2 shall not be reduced unless all other securities of the Company are first entirely excluded from the underwriting and registration. Any Registrable Securities excluded or withdrawn from any underwriting pursuant to this Section 2.2(b) shall be withdrawn from the registration.

(c) The Company shall not be required to effect a registration pursuant to this Section 2.2:

(i) within ninety (90) days following a previously effected registration pursuant to Section 2.2 or Section 2.3;

(ii) after the Company has effected two (2) registrations initiated by the Holders pursuant to this Section 2.2, and such registrations have been declared or ordered effective;

(iii) if within thirty (30) days after receipt of a written request from the Holder pursuant to Section 2.2(a), the Company gives notice to the Holders of the Company's intention to make a public offering of its Common Stock within one hundred twenty (120) days; provided that such offering is, and remains, likely to be completed within such one hundred twenty (120) day period;

(iv) if the Company shall furnish to the Holders requesting a registration statement pursuant to this Section 2.2 a certificate signed by the Chairman of the Board of Directors of the Company stating that in the good faith judgment of the Board of Directors of the Company, it would be seriously detrimental to the Company for such

registration statement to be effected at such time, in which event the Company shall have the right to defer such filing for a period of not more than one hundred twenty (120) days after receipt of the request of the Initiating Holders; provided that such right to delay a request shall be exercised by the Company not more than twice in any twelve (12) month period;

(v) if the total Registrable Securities for which registration has been requested is for less than 500,000 shares of Common Stock or the reasonably anticipated aggregate price to the public of such offering would be less than $1,500,000;

(vi) if the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Section 2.4 below; or

(vii) in any particular jurisdiction in which the Company would be required to qualify to do business or to execute a general consent to service of process in effecting such registration, qualification or compliance.

2.3 PIGGYBACK REGISTRATIONS. If, at any time or from time to time, the Company proposes to file a registration statement under the Securities Act for its own account or for the account of any of its shareholders excluding (i) a registration statement on Form S-4 relating solely to an SEC Rule 145 transaction, (ii) a registration statement on Form S-1 or S-8 relating to employee stock option or purchase plans, or (iii) a registration statement on any successor to such forms, then the Company shall notify all Holders of Registrable Securities in writing at least thirty (30) days prior to the filing of any such registration and will afford each such Holder an opportunity to include in such registration statement all or part of such Registrable Securities held by such Holder. Each Holder desiring to include in any such registration statement all or any part of the Registrable Securities held by it shall, within thirty (30) days after the above-described notice from the Company, so notify the Company in writing. Such notice shall state the intended method of disposition of the Registrable Securities by such Holder. If a Holder decides not to include all of its Registrable Securities in any registration statement thereafter filed by the Company, such Holder shall nevertheless continue to have the right to include any Registrable Securities in any subsequent registration statement or registration statements as may be filed by the Company with respect to offerings of its securities, all upon the terms and conditions set forth herein.

(a) UNDERWRITING. If the registration statement under which the Company gives notice under this Section 2.3 is for an underwritten offering, the Company shall so advise the Holders of Registrable Securities. In such event, the right of any such Holder to be included in a registration pursuant to this Section 2.3 shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their Registrable Securities through such underwriting shall enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such underwriting by the Company. Notwithstanding any other provision of the Agreement, if the underwriter determines in good faith that marketing factors require a limitation of the number of shares to be underwritten, the number of shares that may be included in the underwriting shall be allocated,

first, to the Company and to the Holders on a pro rata basis based on the number of securities the Company and the Holders seek to include in such registration and second, to any other shareholder of the Company (other than a Holder) on a pro rata basis. In no event will shares of any shareholder of the Company (other than a Holder) be included in such registration which would reduce the number of shares which may be included by Holders without the written consent of Holders of not less than a majority of the Registrable Securities proposed to be sold in the offering. If any Holder disapproves of the terms of any such underwriting, such Holder may elect to withdraw therefrom by written notice to the Company and the underwriter, delivered at least ten (10) business days prior to the effective date of the registration statement. Any Registrable Securities excluded or withdrawn from such underwriting shall be excluded and withdrawn from the registration. For any Holder which is a partnership or corporation, the partners, retired partners and shareholders of such Holder, or the estates and family members of any such partners and retired partners and any trusts for the benefit of any of the foregoing persons shall be deemed to be a single "Holder," and any pro rata reduction with respect to such "Holder" shall be based upon the aggregate amount of shares carrying registration rights owned by all entities and individuals included in such "Holder," as defined in this sentence.

(b) RIGHT TO TERMINATE REGISTRATION. The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 2.3 prior to the effectiveness of such registration whether or not any Holder has elected to include securities in such registration. The Registration Expenses of such withdrawn registration shall be borne by the Company in accordance with Section 2.5 hereof.

2.4 FORM S-3 REGISTRATION. In case the Company shall receive from any Holder or Holders of Registrable Securities a written request or requests that the Company effect a registration on Form S-3 (or any successor to Form S-3) or any similar short-form registration statement and any related qualification or compliance with respect to all or a part of the Registrable Securities owned by such Holder or Holders, the Company will:

(a) promptly give written notice of the proposed registration, and any related qualification or compliance, to all other Holders of Registrable Securities; and

(b) as soon as practicable, effect such registration and all such qualifications and compliances as may be so requested and as would permit or facilitate the sale and distribution of all or such portion of such Holder's or Holders' Registrable Securities as are specified in such request, together with all or such portion of the Registrable Securities of any other Holder or Holders joining in such request as are specified in a written request given within thirty (30) days after receipt of such written notice from the Company; provided, however, that the Company shall not be obligated to effect any such registration, qualification or compliance pursuant to this Section 2.4:

(i) if Form S-3 (or any successor or similar form) is

not available for such offering by the Holders, or

(ii) if the Holders, together with the holders of any other securities of the Company entitled to inclusion in such registration, propose to sell Registrable Securities and

such other securities (if any) at an aggregate price to the public of less than Five Hundred Thousand Dollars ($500,000), or

(iii) if within thirty (30) days after receipt of a written request from Initiating Holders pursuant to this Section 2.4, the Company gives notice to the Holders of the Company's intention to make a public offering within one hundred twenty (120) days; provided, that such offering remains likely to be completed within such one hundred twenty (120) day period, or

(iv) if the Company shall furnish to the Holders a certificate signed by the Chairman of the Board of Directors of the Company stating that in the good faith judgment of the Board of Directors of the Company, it would be seriously detrimental to the Company and its shareholders for such Form S-3 registration to be effected at such time, in which event the Company shall have the right to defer the filing of the Form S-3 registration statement for a period of not more than one hundred twenty (120) days after receipt of the request of the Holder or Holders under this Section 2.4; provided, that such right to delay a request shall be exercised by the Company not more than twice in any twelve (12) month period, or

(v) in any particular jurisdiction in which the Company would be required to qualify to do business or to execute a general consent to service of process in effecting such registration, qualification or compliance.

Subject to the foregoing, the Company shall file a Form S-3 registration statement covering the Registrable Securities and other securities so requested to be registered as soon as practicable after receipt of the request or requests of the Holders. Registrations effected pursuant to this Section 2.4 shall not be counted as demands for registration or registrations effected pursuant to Sections 2.2 or 2.3, respectively.

2.5 EXPENSES OF REGISTRATION. Except as specifically provided herein, all Registration Expenses incurred in connection with any registration, qualification or compliance pursuant to Section 2.2 or any registration under Section 2.3 or Section 2.4 herein shall be borne by the Company. All Selling Expenses incurred in connection with any registrations pursuant to this Agreement, shall be borne by the holders of the securities so registered pro

rata on the basis of the number of shares so registered. The Company shall not, however, be required to pay for expenses of any registration proceeding begun pursuant to Sections 2.2 or 2.4, the request of which has been subsequently withdrawn by the Initiating Holders unless the withdrawal is based upon material adverse information concerning the Company of which the Initiating Holders were not aware at the time of such request. If the Holders are required to pay the Registration Expenses, then such expenses shall be borne by the holders of securities (including Registrable Securities) requesting such registration in proportion to the number of shares for which registration was requested.

2.6 OBLIGATIONS OF THE COMPANY. Whenever required to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) Prepare and file with the SEC a registration statement with respect to such Registrable Securities and use all reasonable efforts to cause such registration statement to become effective and keep such registration statement effective for up to ninety (90) days (or two hundred seventy (270) days if the registration statement is on Form S-3) or, if earlier, until the Holder or Holders have completed the distribution related thereto;

(b) Prepare and file with the SEC such amendments and supplements to such registration statement and the prospectus used in connection with such registration statement as may be necessary to comply with the provisions of the Securities Act with respect to the disposition of all securities covered by such registration statement for the period set forth in paragraph (a) above;

(c) Furnish to the Holders such number of copies of a prospectus, including a preliminary prospectus, in conformity with the requirements of the Securities Act, and such other documents as they may reasonably request in order to facilitate the disposition of Registrable Securities owned by them;

(d) Use its reasonable best efforts to register and qualify the securities covered by such registration statement under such other securities or Blue Sky laws of such jurisdictions as shall be reasonably requested by the Holders; provided that the Company shall not be required in connection therewith or as a condition thereto to qualify to do business or to file a general consent to service of process in any such states or jurisdictions;

(e) In the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the managing underwriter(s) of such offering. Each Holder

participating in such underwriting shall also enter into and perform its obligations under such an agreement;

(f) Notify each Holder of Registrable Securities covered by such registration statement at any time when a prospectus relating thereto is required to be delivered under the Securities Act of the happening of any event as a result of which the prospectus included in such registration statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances then existing; and

(g) Use its best efforts to furnish, on the date that such Registrable Securities are delivered to the underwriters for sale, if such securities are being sold through underwriters, (i) an opinion, dated as of such date, of the legal counsel representing the Company for the purposes of such registration, in form and substance as is customarily given to underwriters in an underwritten public offering, addressed to the underwriters, if any, and (ii) a letter dated as of such date, from the independent certified public accountants of the Company, in form and substance as is customarily given by independent certified public accountants to underwriters in an underwritten public offering addressed to the underwriters.

2.7 TERMINATION OF REGISTRATION RIGHTS. A Holder's registration rights shall expire if all Registrable Securities held by and issuable to such Holder (and its Affiliates, partners,

former partners, members and former members) may be sold under Rule 144 during any ninety (90) day period.

2.8 DELAY OF REGISTRATION; FURNISHING INFORMATION.

(a) No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any such registration as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 2.

(b) It shall be a condition precedent to the obligations of the Company to take any action pursuant to Sections 2.2, 2.3 or 2.4 that the selling Holders shall furnish to the Company such information regarding themselves, the Registrable Securities held by them and the intended method of disposition of such securities as shall be required to effect the registration of their Registrable Securities.

2.9 INDEMNIFICATION. In the event any Registrable Securities are

included in a registration statement under Sections 2.2, 2.3 or 2.4:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each Holder and its Affiliates, the partners, directors, officers of each Holder and its Affiliates, any underwriter (as defined in the Securities Act) for such Holder and each person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any losses, claims, damages, or liabilities (joint or several) to which they may become subject under the Securities Act, the Exchange Act or other federal or state law, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any of the following statements, omissions or violations (collectively a "Violation") by the Company: (i) any untrue statement or alleged untrue statement of a material fact contained in such registration statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto, (ii) the omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading, or (iii) any violation or alleged violation of the Securities Act, the Exchange Act, any state securities law or any rule or regulation promulgated under the Securities Act, the Exchange Act or any state securities law in connection with the offering covered by such registration statement; and the Company will pay as incurred to each such Holder or its Affiliates, partner, officer, director, underwriter or controlling person any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability or action, including amounts paid in settlement thereof; provided however, that the indemnity agreement contained in this Section 2.9(a) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the written consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable to an indemnified party in any such case for any such loss, claim, damage, liability or action to the extent that it arises out of or is based upon a Violation which occurs in reliance upon and in conformity with written information furnished expressly for use in connection with such registration by such indemnified party.

(b) To the extent permitted by law, each Holder will, if Registrable Securities held by such Holder are included in the securities as to which such registration qualification or compliance is being effected, indemnify and hold harmless the Company and its Affiliates, each of their directors, their officers and each person, if any, who controls the Company and its Affiliates within the meaning of the Securities Act, any underwriter and any other Holder selling securities under such registration statement or any of such other Holder's partners, directors or officers or any person who controls such Holder, against any losses, claims, damages or liabilities joint or several) to which

the Company and its Affiliates or any such director, officer, controlling person, underwriter or other such Holder, or partner, director, officer or controlling person of such other Holder, may become subject under the Securities Act, the Exchange Act or other federal or state law, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any Violation, in each case to the extent (and only to the extent) that such Violation occurs in reliance upon and in conformity with written information furnished by such Holder under an instrument duly executed by such Holder and stated to be specifically for use in connection with such registration; and each such Holder will pay as incurred any legal or other expenses reasonably incurred by the Company or any such director, officer, controlling person, underwriter or other Holder, or partner, officer, director or controlling person of such other Holder in connection with investigating or defending any such loss, claim, damage, liability or action if it is judicially determined that there was such a Violation; provided, however, that the indemnity agreement contained in this Section 2.9(b) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the written consent of the Holder, which consent shall not be unreasonably withheld; provided further, that in no event shall any indemnity with respect to a specified Holder under this Section 2.9 exceed the net proceeds from the offering received by such Holder.

(c) Promptly after receipt by an indemnified party under this Section 2.9 of notice of the commencement of any action (including any governmental action), such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Section 2.9, deliver to the indemnifying party a written notice of the commencement thereof; provided, however, that the failure to give prompt notice shall not: (i) limit the indemnification obligations of the indemnifying party hereunder except to the extent that the delay in giving, or failure to give, prompt notice prejudices the ability of the indemnifying party to defend against such action, or (ii) relieve the indemnifying party of any liability that it may have to any indemnified party otherwise than under this Section 2.9. The indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party shall have the right to retain its own counsel, with the reasonable fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such proceeding.

(d) If the indemnification provided for in this Section 2.9 is held by a court of competent jurisdiction to be unavailable to an indemnified party with respect to any losses, claims, damages or liabilities referred to herein, the indemnifying party, in lieu of indemnifying

such indemnified party thereunder, shall to the extent permitted by applicable law contribute to the amount paid or payable by such indemnified party as a result of such loss, claim, damage or liability in such proportion as is appropriate to reflect the relative fault of the indemnifying party on the one hand and of the indemnified party on the other in connection with the Violation(s) that resulted in such loss, claim, damage or liability, as well as any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by a court of law by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission to state a material fact relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission; provided, that in no event shall any contribution by a Holder hereunder exceed the net proceeds from the offering received by such Holder. The parties hereto agree that it would not be just and equitable if contribution pursuant to this Section 2.9(d) were determined by pro rata allocation or by any other method of allocation which does not take account of the equitable consideration referred to in this paragraph.

(e) The obligations of the Company and Holders under this Section 2.9 shall survive completion of any offering of Registrable Securities in a registration statement and the termination of this agreement and shall be in lieu of the obligations set forth in Section 3.7 hereof. No indemnifying party, in the defense of any such claim or litigation, shall, except with the consent of each indemnified Party, consent to entry of any judgment or enter into any settlement which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such indemnified Party of a release from all liability in respect to such claim or litigation.

2.10 ASSIGNMENT OF REGISTRATION RIGHTS. The rights to cause the Company to register Registrable Securities pursuant to this Section 2 may be assigned by a Holder; provided, however, that (i) the transferor shall, within ten (10) days after such transfer, furnish to the Company written notice of the name and address of such transferee or assignee and the securities with respect to which such registration rights are being assigned and (ii) such transferee shall agree in writing to be subject to all restrictions, terms and conditions set forth in this Agreement.

2.11 AMENDMENT OF REGISTRATION RIGHTS. Any provision of this Section 2 may be amended and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company and the holders of a majority of the Registrable Securities held by all Holders. Any provision of this Section 2 and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively) by any party so waiving in writing. Any amendment or waiver effected in accordance with this Section 2.11 shall be binding upon each Holder and the Company. By acceptance of any benefits under this Section 2, Holders of Registrable Securities hereby agree to be bound by

the provisions hereunder.

2.12 LIMITATION ON SUBSEQUENT REGISTRATION RIGHTS. After the date of this Agreement, the Company shall not, without the prior written consent of a majority of the Registrable Securities held by all Holders, enter into any agreement with any holder or

prospective holder of any securities of the Company that would grant such holder registration rights pari passu or senior to those granted to the Holders hereunder.

2.13 RULE 144 REPORTING. With a view to making available to the Holders the benefits of certain rules and regulations of the SEC which may permit the sale of the Registrable Securities to the public without registration, the Company agrees that it will use its best efforts to:

(a) make and keep public information available at all time, as those terms are understood and defined in Rule 144 or any similar or analogous rule promulgated under the Securities Act;

(b) file with the SEC, in a timely manner, all reports and other documents required of the Company under the Exchange Act; and

(c) so long as a Holder owns any Registrable Securities, furnish to such Holder forthwith upon request: a written statement by the Company as to its compliance with the reporting requirements of said Rule 144 of the Securities Act and of the Exchange Act; a copy of the most recent annual or quarterly report so filed of the Company; and such other reports and documents as a Holder may reasonably request in availing itself of any rule or regulation of the SEC allowing it to sell any such securities without registration.

SECTION 3. COVENANTS OF THE COMPANY

3.1 BASIC FINANCIAL INFORMATION AND REPORTING.

(a) The Company and its Subsidiaries shall maintain true books and records of account in which full and correct entries shall be made of all their business transactions pursuant to a system of accounting established and administered in accordance with generally accepted accounting principles consistently applied, and shall set aside on their books all such proper accruals and reserves as shall be required under generally accepted accounting principles consistently applied.

(b) As soon as practicable after the end of each fiscal year of the Company, and in any event within one hundred twenty (120) days

thereafter, the Company shall furnish the Investor a consolidated balance sheet of the Company and its Subsidiaries, as at the end of such fiscal year, and a consolidated statement of income and a consolidated statement of cash flows of the Company and its Subsidiaries, for such year, all prepared in accordance with generally accepted accounting principles consistently applied and setting forth in each case in comparative form the figures for the previous fiscal year, all in reasonable detail (the "Audited Financial Statements"). Such financial statements shall be accompanied by a report and opinion thereon by a "Big 5" firm of independent public accountants of national standing selected by the Company's Board of Directors (the "Audit Report") and a certificate of the Chief Executive Officer (or principal operating officer) of the Company certifying that no information inconsistent with that set forth in the information in the Audited Financial Statements and the Audit Report has been filed with any governmental agency or given to the Company's or its Subsidiaries' lenders.

(c) The Company shall furnish the Investor, as soon as practicable after the end of the first, second and third quarterly accounting periods in each fiscal year of the Company and its Subsidiaries, and in any event within forty-five (45) days thereafter, a consolidated balance sheet of the Company and its Subsidiaries as of the end of each such quarterly period, and a consolidated statement of income and a consolidated statement of cash flows of the Company and its Subsidiaries for such period and for the current fiscal year to date, prepared in accordance with generally accepted accounting principles, with the exception that no notes need be attached to such statements and year-end audit adjustments may not have been made.

(d) The Company shall furnish the Investor, as soon as practicable after the end of each calendar month in each fiscal year of the Company and its Subsidiaries, and in any event within thirty (30) days thereafter, a consolidated balance sheet of the Company and its Subsidiaries as of the end of each such monthly period, and a consolidated statement of income and a consolidated statement of cash flows of the Company and its Subsidiaries for such period and for the current fiscal year to date, prepared in accordance with generally accepted accounting principles, with the exception that no notes need be attached to such statements and year-end audit adjustments may not have been made.

(e) The Company shall furnish to the Investor, within five (5) business days after an executive officer of the Company or its Subsidiaries, as the case may be, has knowledge of: (i) the occurrence of a material default hereunder, or under any material agreement of the Company or its Subsidiaries, including without limitation any loan or financing agreement, (ii) the commencement of any material legal proceeding against the Company or the occurrence of any event which is reasonably likely (with or without the passage of time) to have a material adverse effect on the Company and its Subsidiaries,

or (iii) any effect, condition, event, or circumstance that has resulted in a material and adverse effect on the business, properties, assets, condition (financial or otherwise), results of operations, prospects or liabilities of the Company or its Subsidiaries, a statement from the Chief Executive Officer (or the principal operating officer) of the Company describing such occurrence and management's anticipated response.

(f) The Company shall furnish to the Investor such other financial and other information of the Company and its Subsidiaries as the Investor may reasonably request.

(g) The Company shall furnish to the Investor within five (5) days after the date of filing or delivery, copies of all materials of whatsoever nature filed or delivered by the Company or its Subsidiaries thereof (i) with the SEC; (ii) with any national or foreign securities exchange or quotation bureau; and (iii) to holders of any class of its capital stock or other securities.

(h) In the event the Company or its Subsidiaries fail to timely provide the Investor with the reports required by Sections 3.1(b), (c) or (d) above, the Investor may, after thirty (30) days after providing written notice of such failure to the Company and its Subsidiaries, during which period the Company shall have the opportunity to cure such deficiency, request that the accounting firm of its choice audit the Company and its Subsidiaries, at the Company's expense, in order to produce such reports in a manner satisfactory to the

Holders, in their reasonable discretion. The Company and its Subsidiaries shall cooperate in any such audit.

3.2 INSPECTION RIGHTS. The Investor shall have the right to visit and inspect any of the properties of the Company or any of its Subsidiaries (including books of account, reports and other papers), to make extracts therefrom, and to discuss the affairs, finances and accounts of the Company or any of their subsidiaries with their officers, employees and accountants (and by this provision the Company and its Subsidiaries authorizes their accountants to discuss such finances and affairs with the Investor's representatives), and to review such information as is reasonably requested all upon reasonable prior notice at such normal business hour times and as often as may be reasonably requested, but not in a manner therein that unreasonably disrupts normal business operations; provided, however, that the Company and its Subsidiaries shall not be obligated under this Section 3.2 with respect to a competitor of the Company or its Subsidiaries or with respect to information which the Board of Directors determines in good faith is confidential and should not, therefore, be disclosed or which is subject to non-disclosure obligations which, in the

Company's opinion, would be violated by permitting inspection pursuant thereto.

3.3 CONFIDENTIALITY OF RECORDS. Investor agrees to: (a) use, and to use its commercially reasonable efforts to insure that its authorized representatives use, the same degree of care as Investor uses to protect its own confidential information to keep confidential any information furnished to it (so long as such information is not in the public domain), (b) comply with the non-disclosure provisions of any agreement between the Company and any third party relating to proprietary or confidential information disclosed to the Investor by the Company (provided that the Company informs the Investor of such non-disclosure provisions), and (c) use the proprietary or confidential information only for evaluating its investment, except that Investor may disclose such proprietary or confidential information to any partner, subsidiary or parent of the Investor for the purpose of evaluating its investment in the Company and its Subsidiaries as long as such partner, subsidiary or parent is advised of the confidentiality provisions of this Section 3.3.

3.4 RESERVATION OF COMMON STOCK. The Company and its shareholders shall take any and all action necessary to reserve for issuance the number of shares of Common Stock into which all of the shares of Series F Preferred Stock are convertible, and shall take such further action from time to time thereafter to increase the number of shares of Common Stock reserved for issuance as required by any increase in the number of shares of Common Stock into which the Series F Preferred Stock may then be converted.

3.5 INDEMNIFICATION AND ADVANCEMENT.

(a) To the extent permitted by law, the Company and its Subsidiaries, jointly and severally, hereby agree to hold harmless and indemnify the Investor, the Investor's direct and indirect Affiliates, and each of their partners, officers, directors, employees, shareholders, agents, and representatives (collectively, referred to as the "Indemnitees") against any and all expenses (including reasonable attorneys' fees), damages, judgments, fines, amounts paid in settlements, or any other amounts that an Indemnitee incurs as a result of any claim or claims

made against it in connection with any threatened, pending or completed action, suit, arbitration, investigation or other proceeding arising out of, or relating to the Indemnitee's performance of its obligations or the exercise of its rights in accordance with the terms of this Agreement, including actions taken in their capacity as directors or shareholders of the Company; provided, however, that no Indemnitee shall be entitled to be held harmless or indemnified by the Company for acts, conduct or omissions by any Indemnitee involving gross negligence, intentional misconduct or knowing and culpable violation of the law.

(b) The Company or its Subsidiaries shall reimburse, promptly following request therefor, all reasonable expenses incurred by an Indemnitee in connection with any threatened, pending or completed action, suit, arbitration, investigation or other proceeding arising out of, or relating to, the Indemnitees' actions in connection with any transaction undertaken in connection with this Agreement, but only to the extent permitted under Section 3.5(a) above.

(c) The Company's and its Subsidiaries' indemnity obligations set forth above are subject to Section 2.9 above and to the Indemnitees providing prompt written notice of a claim. The Company and its Subsidiaries shall control the defense of any such action and, at its discretion, may enter into a stipulation of discontinuance or settlement thereof; provided that the Company and its Subsidiaries may not discontinue any action or settle any claim in a manner that does not unconditionally release the Indemnitee or requires an admission by an Indemnitee or payment by an Indemnitee without such Indemnitee's prior written approval. The Indemnitees shall, at the Company's and its Subsidiaries' expense and reasonable request, cooperate with the Company and its Subsidiaries in any such defense and shall make available to the Company and its Subsidiaries at the Company's and its Subsidiaries' expense all those persons, documents (excluding attorney/client or attorney work product materials) reasonably required by the Company and its Subsidiaries in the defense of any such action. The Indemnitees may, at their expense, assist in such defense.

3.6 REAL PROPERTY HOLDING CORPORATION. The Company covenants that it will operate in a manner such that it will not become a "United States real property holding corporation" as that term is defined in Section 897(c)(2) of the Internal Revenue Code of 1986, as amended, and the regulations thereunder (a "USRPHC"). The Company agrees to make determinations as to its status as a USRPHC, and will file statements concerning those determinations with the Internal Revenue Service, in the manner and at the times required under Reg. Section 1.897-2(h), or any supplementary or successor provision thereto. Within 30 days of a request from the Investor or any of its partners, the Company will inform the requesting party, in the manner set forth in Reg. Section 1.897-2(h)(1)(iv) or any supplementary or successor provision thereto, whether that party's interest in the Company constitutes a United States real property interest (within the meaning of Internal Revenue Code Section 897(c)(1) and the regulations thereunder) and whether the Company has provided to the Internal Revenue Service all required notices as to its USRPHC status.

3.7 TERMINATION OF COVENANTS. Except for the covenants set forth in Sections 3.4, 3.5, 3.7 and 3.9, all covenants of the Company and its Subsidiaries contained in Section 3 of this Agreement shall expire and terminate as to the Investor upon the earlier of (a) the acquisition of

all or substantially all of the assets of the Company or (b) an acquisition of the Company by another corporation or entity by consolidation, merger or other reorganization in which the holders of the Company's outstanding voting stock immediately prior to such transaction own, immediately after such transaction, securities representing less than fifty percent (50%) of the voting power of the corporation or other entity surviving such transaction (a "Change in Control"); provided, however, that with respect to the Investor or any particular assignee, all covenants contained in Section 3 shall terminate solely with respect to the Investor or such assignee immediately upon such time as all Registrable Securities held by the Investor or such Assignee, as the case may be, are freely transferable under Rule 144(k).

3.8 INVESTOR'S SPECIAL VOTING RIGHTS. As long as any of the shares of Series F Preferred Stock are outstanding, without limiting the rights of the holders of shares of Common Stock to vote on any matter set forth in this Section, the holders of Series F Preferred Stock shall vote as a separate voting group on, and the affirmative vote of the holders of Series F Preferred Stock who own at least a majority of the Series F Preferred Stock then outstanding (whether by written consent or by a duly called meeting) shall be required to authorize, any action by the Company or its Subsidiaries which would:

(a) in any manner (A) authorize, create, amend or issue any class or series of capital stock ranking, either as to payment of dividends, distribution of assets upon liquidation or otherwise, or redemption, prior to or on parity with the Series F Preferred Stock or (B) authorize, create, amend or issue any shares of any class or series or any bonds, debentures, notes or other obligations convertible into or exchangeable for, or having optional rights to purchase, any shares having any such priority or on parity with the Series F Preferred Stock;

(b) in any manner alter or change the designation or the powers, preferences or rights or the qualifications, limitations or restrictions of the Series F Preferred Stock;

(c) reclassify shares of Common Stock, or any other shares of any class or series of capital stock hereinafter created junior to the Series F Preferred Stock into shares of any class or series of capital stock ranking, either as to payment of dividends, distribution of assets upon liquidation or otherwise, or redemption, prior to or on a parity with the Series F Preferred Stock;

(d) increase the authorized number of shares of Series F Preferred Stock, issue additional shares of Series F Preferred Stock or authorize any other class or series of capital stock of the Company or its Subsidiaries;

(e) result in any material change in the nature of the business engaged in by the Company;

(f) create, authorize, reserve or involve the issuance of shares of Common Stock which in the aggregate exceeds 3,323,700 in connection

with options or other rights to purchase shares of Common Stock hereafter issued to officers, employees, directors or consultants of the Company pursuant to any plan, agreement or other arrangements, including without limitation, options granted pursuant to the Company's 1998 Stock Option Plan, the

Company's Stock Option Plan for Directors and the Company's 1997 Equity Compensation Plan adopted by the Company on May 21, 1997 each as amended or restated from time to time;

(g) result in the redemption, repurchase or other acquisition by the Company of capital stock or other securities of the Company or its Subsidiaries, except for (i) redemption of the Series F Preferred Stock as set forth in the Designations and (ii) repurchases or other acquisitions of capital stock of the Company at a purchase price not in excess of the original purchase price of such capital stock, from employees of the Company upon such employees' termination of employment from the Company pursuant to the terms and conditions of agreements which provide the Company the right to repurchase such capital stock upon such termination of employment;

(h) result in (i) any liquidation, dissolution, winding-up or similar transaction of the Company or its Subsidiaries, (ii) a sale of all or substantially all of the assets of the Company or its Subsidiaries or a merger, consolidation, sale of capital stock or other transaction in which the holders of capital stock of the Company and its Subsidiaries, in the aggregate, immediately prior to such transaction will hold, immediately after such transaction, less than 50% of the aggregate voting power of outstanding capital stock of the surviving company, or (iii) any acquisition by the Company or its Subsidiaries of another corporation or other business entity, or the assets thereof, in which the aggregate consideration paid, or to be paid, by the Company equals or exceeds $10,000,000 (including, without limitation, all assumed debt, all cash payments, and the fair market value of all securities or other property issued as consideration);

(i) result in the creation of indebtedness of the Company or its Subsidiaries, including, without limitation, any loan agreement, promissory note (or other evidence of indebtedness), mortgage, security agreement or lease, such that after such transaction the aggregate indebtedness of the Company and its Subsidiaries to all parties would exceed $3,500,000 (other than indebtedness relating to that certain lease under the Master Equipment Lease Agreement dated July 23, 1997 by and between the Company and Triangle Technology Leasing); or

(j) that would in any way amend, alter, restate or otherwise change the Company's Articles of Incorporation or Bylaws, or the organizational documents of the Company's Subsidiaries, as they are currently in effect.

3.9 RESTRICTIVE AGREEMENTS. Neither the Company nor any of its Subsidiaries will enter into or become obligated under any agreement or contract (excluding sales agreements executed in the ordinary course of business) including, without limitation, any loan agreement, promissory note (or other evidence of indebtedness), mortgage, security agreement or lease, which by its terms prevents or restricts the Company or its Subsidiaries from performing its obligations under this Agreement, any related agreements or under the terms of the Series F Preferred Stock.

SECTION 4. MISCELLANEOUS

4.1 GOVERNING LAW. This Agreement shall be governed by and construed under the laws of the Commonwealth of Pennsylvania, notwithstanding the conflicts of laws principals of any jurisdiction.

4.2 SURVIVAL. The representations, warranties, covenants, and agreements made herein shall survive any investigation made by any Holder and the closing of the transactions contemplated hereby. All statements as to factual matters contained in any certificate or other instrument delivered by or on behalf of the Company or its Subsidiaries or the Investor pursuant hereto in connection with the transactions contemplated hereby shall be deemed to be representations and warranties by the Company or its Subsidiaries or the Investor, as applicable, hereunder solely as of the date of such certificate or instrument.

4.3 SUCCESSORS AND ASSIGNS. Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors, and administrators of the parties hereto and shall inure to the benefit of and be enforceable by each person who shall be a holder of Registrable Securities from time to time; provided, however, that prior to the receipt by the Company of adequate written notice of the transfer of any Registrable Securities specifying the full name and address of the transferee, the Company may deem and treat the person listed as the holder of such shares in its records as the absolute owner and holder of such shares for all purposes, including the payment of dividends or any redemption price.

4.4 ENTIRE AGREEMENT. This Agreement, the Exhibits and Schedules hereto, the Conversion Agreement, the Note Amendment, the Designations and the other documents delivered pursuant thereto constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and no party shall be liable or bound to any other in any manner by any representations, warranties, covenants and agreements except as specifically set forth herein and therein.

4.5 SEVERABILITY. In case any provision of the Agreement shall be invalid, illegal, or unenforceable, the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

4.6 AMENDMENT AND WAIVER.

(a) Except as otherwise expressly provided, this Agreement may be amended or modified only upon the written consent of the Company and the Investor.

(b) Except as otherwise expressly provided, the obligations of the Company, its Subsidiaries and the rights of the Holders under this Agreement may be waived only with the written consent of the Investor.

(c) Notwithstanding the foregoing, this Agreement may be amended with only the written consent of the Company and its Subsidiaries to include additional purchasers of

Shares as "Investors," "Holders" and parties hereto in accordance with the provisions hereof, except that a Holder may assign the rights hereunder without such consent pursuant to the provisions set forth in Section 2.10 hereof.

4.7 DELAYS OR OMISSIONS. It is agreed that no delay or omission to exercise any right, power, or remedy accruing to any Holder, upon any breach, default or noncompliance of the Company under this Agreement shall impair any such right, power, or remedy, nor shall it be construed to be a waiver of any such breach, default or noncompliance, or any acquiescence therein, or of any similar breach, default or noncompliance thereafter occurring. It is further agreed that any waiver, permit, consent, or approval of any kind or character on any Holder's part of any breach, default or noncompliance under the Agreement or any waiver on such Holder's part of any provisions or conditions of this Agreement must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement, by law, or otherwise afforded to Holders, shall be cumulative and not alternative.

4.8 NOTICES. All notices required or permitted hereunder shall be in writing and shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by confirmed telex or facsimile if sent during normal business hours of the recipient; if not, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the party

to be notified at the address as set forth on the signature pages hereof or Exhibit A hereto or at such other address as such party may designate by ten (10) days advance written notice to the other parties hereto.

4.9 TITLES AND SUBTITLES. The titles of the sections and subsections of this Agreement are for convenience of reference only and are not to be considered in construing this Agreement.

4.10 COUNTERPARTS. This Agreement and any amendment or supplement hereto may be executed by the parties in separate counterparts, whether originally or by facsimile, each of which when so executed and delivered, shall be an original, but all such counterparts shall together constitute one and the same agreement.

[SIGNATURES ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the parties hereto have executed this Investor Rights Agreement as of the date set forth in the first paragraph hereof.

COMPANY:	SAFEGUARD:
TANGRAM ENTERPRISE SOLUTIONS, INC.	SAFEGUARD SCIENTIFICS, INC.
By: _____	By:_____
Name: _____	Name: _____
Title: _____	Title:_____
Address: 11000 Regency Parkway Suite 401 Cary, North Carolina 27511-8504	Address: 800 The Safeguard Bldg. 435 Devon Park Drive Wayne, PA 19087-1945