FORM PTO-1595 06	5-01-1998	U.S. DEPARTMENT OF COMMERCE
1-31-92 R		HEET Patent and Trademark Offic
MIKD USG VO		
To the Emporable Commissioner of Paten  1. Name of conveying party(ies):	00724918	ginal documents or copy thereof.
1. Name of conveying party(ies):	2. Name and addre	ess of receiving party(ies):
MAY 0 6 1998 Doublas Claffey	Name: <u>Analyt</u>	tical Graphics, Inc.
	Internal Address:	
Additional		
3. Nature of conveyance:	Street Address:	325 Technology Drive
☐ Security Agreement ☐ Change of Name	City: Malver	n State: PA ZIP: 19355
	Oity	5 outc. 174 211 . 17355
□ Other		
Execution Date: March 4, 1998	Addition	nal name(s) & address(es) attached? □ Yes 🛮 No
4. Application number(s) or patent number(s):		
If this document is being filed together with a new application	n, the execution date of the appl	lication is:
A. Patent Application No.(s)	B. Patent No.(s)	
09/031,800		
5. Name and address of party to whom correspondence	al numbers attached? □ Yes ☑ 6.Total number of	applications and patents involved:1
concerning document should be mailed:		
Name: Jon L. Roberts, Esq.		
Internal Address:	7. Total fee (37 CF	FR 3.41):\$ 40.00
	Enclos	sed
	□ Autho	rized to be charged to deposit account
	- Author	
Street Address: Roberts & Brownell, LLC	8. Deposit account	
8381 Old Courthouse Road, Suite 212	-	18/1579
City: Vienna State: VA ZIP: 22182	(Attach duplicate O NOT USE THIS SPACE	e copy of this page if paying by deposit account)
D.	O NOT OSE THIS STACE	
9. Statement and signature.	<del></del>	
05/04/1994 MHBLING (10000088) (19931409) belief, the coregoing inf		
02 FC:581 Jon L. Roberts, Esq. 40.00 00	Signature	5/6/98 Poto
Name of Person Signing	_	Date
	Total number of pages include	ding cover sheet:3
DMB No. 0651-001 I (exp. 4/94)		
	T-T-T-T	PATENT
	REEL:	9192 FRAME: 0876

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Douglas Claffey, James Woodburn

Serial No.: Not Yet Assigned Group Art Unit: Not Yet Assigned

Filed: 09/031,800 Examiner: Not Yet Assigned

FOR: METHOD AND APPARATUS FOR DETERMINING CLOSE APPROACHES FOR EARTH-FIXED LAUNCH TRAJECTORIES

\* \* \* \* \*

## **ASSIGNMENT Pursuant to 37 CFR § 3.56**

\* \* \* \* \*

I, Douglas Claffey, residing at 11 Rogers Way, Malvern, PA 19355 for good and valuable consideration, the sufficiency of which is hereby acknowledged, do hereby sell, assign and transfer unto Analytical Graphics, Inc., a corporation organized under the laws of the Commonwealth of Pennsylvania and having its principal office at 325 Technology Drive, Malvern, PA 19355 (hereinafter "ASSIGNEE,"), the entire right, title and interest, together with all rights of priority, in and to my invention for a **METHOD AND APPARATUS FOR** 

## DETERMINING CLOSE APPROACHES FOR EARTH-FIXED LAUNCH

**TRAJECTORIES**, as described and/or claimed in my application for Letters Patent of the United States of America, filed herewith, as well as all foreign counterparts thereof together with all Letters Patent issuing on the aforesaid application for Letters Patent, the same to be held and enjoyed by ASSIGNEE, its successors, assigns or other legal representatives, to the full ends of the terms of all said Letters Patent therefor which may be granted.

I HEREBY AUTHORIZE ASSIGNEE to make application for and to receive Letters

Patent for said invention in any foreign countries in its own name, or in my name, at its election.

PATENT REEL: 9192 FRAME: 0877 AND I HEREBY COVENANT AND AGREE that I will execute or procure any further necessary assurance of title to said invention and any Letters Patent which may issue therefor and that I will, at any time, upon the request and at the expense of ASSIGNEE deliver any testimony in any legal proceedings and execute all papers that may be necessary or desirable to perfect the title to said invention or any Letters Patent which may be granted therefor in ASSIGNEE, its successors, assigns, or other legal representatives, and that I will, at any time, upon the request and at the expense of the ASSIGNEE execute any continuations, divisions, reissues, or any other additional applications for Letters Patent for said invention or any part or parts thereof, all of which applications and any Letters Patent issuing thereof are hereby assigned to ASSIGNEE, and will make all rightful oaths, and do all lawful acts requisite for procuring the same therein, without further compensation, but at the expense of ASSIGNEE, its successors, assigns or other legal representatives.

**AND I HEREBY AUTHORIZE AND REQUEST** the Commissioner of Patents and Trademarks to issue any and all Letters Patent of the United States for said invention, resulting from any of the aforesaid application to assignee.

WITNESS MY HAND and seal this 4 of hund, 1998.
Douglas Claffey
STATE OF
On this day of he ight personally appeared before me <b>Douglas Claffey</b> to me known, and known by me to be the same person described in and who executed the foregoing
instrument, and acknowledged that he executed the same, of his own free will and for the purposes

set forth.

RECORDED: 05/06/1998

NOTARIAL SEAL LOUISE B MOFFETT Notary Public Skippack Twp , Montgomery County My Commission Expires May 17, 1999

PATENT

REEL: 9192 FRAME: 0878

Notary Public