SUBSTITUTE RECORDA U5 FORM PTO-1595	U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office
To the Honorable Commissioner of Patents and	original documents or copy thereof.
Name of conveying party(ies):	original documents or copy thereof. of receiving party(ies):
The Aerospace Corporation 5-14-03	Name: United States Air Force
Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No	Internal Address: AFMC LO/JAZ
3. Nature of conveyance:	Street Address: 2240 B Street, Room 100 TRADENIA PARTIE
☐ Assignment ☐ Merger	ZZ40 B Sileer, ROOM 100
☐ Assignment ☐ Merger ☐ Security Agreement ☐ Change of Name ☑ Other Confirmatory License	City: Wright-Patterson Air Force Base
	State: Ohio Zip: 45433-7109
Execution Date(s): March 10, 2003	
This instrument should be recorded on the governmental register in accordance with 37 CFR 7.1(e)(1).	Additional 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,	the execution date of the application is:
A. Patent Application No.(s):	B. Patent No.(s):
10/157,432	J. Talent Hei(e).
10/137,432	
Additional numbers attached? ☐ Yes ☒ No	
Additional numbers atta	ched? □ Yes 図 No
Additional numbers atta 5. Name and address of party to whom correspondence	ched? Yes No 6. Total number of applications and patents involved:
5. Name and address of party to whom correspondence	
5. Name and address of party to whom correspondence concerning document should be mailed:	
5. Name and address of party to whom correspondence concerning document should be mailed:	
Name and address of party to whom correspondence concerning document should be mailed: Name: Fredric L. Sinder Internal Address: AFMC LO/JAZ	6. Total number of applications and patents involved: 1
Name and address of party to whom correspondence concerning document should be mailed: Name: Fredric L. Sinder	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 3.41)\$ □ Enclosed ☑ Not applicable The instrument to be recorded is not an instrument
Name and address of party to whom correspondence concerning document should be mailed: Name: Fredric L. Sinder Internal Address: AFMC LO/JAZ Street Address: 2240 B Street, Room 100	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 3.41)\$ □ Enclosed ☑ Not applicable
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PATENT REEL: 014085 FRAME: 0519



Cnli0103442 February 27, 2003

Confirmatory License

Application For:

Eigenvalue Quadric Surface Method for Determining When Two

Ellipsoids Share Common Volume for Use in Spatial Collision Detection

and Avoidance

Inventor(s):

F. K. Chan, M. L. Greer

Serial No.:

10/157,432

Contract No.: F04701-00-C-0009

Filing Date:

05/29/02

Contractor: The Aerospace Corporation

The invention identified above is a "Subject Invention" under Patent Rights clause FAR 52.227, which is included in Contract No. F04701-00-C-0009 with the Department of the Air Force. This document confirms the rights acquired by the Government through the referenced clause, including a paid-up license in this invention, corresponding patent applications and in any resulting patents.

The Government is hereby granted an irrevocable power to inspect and make copies of the above-identified patent application.

Date Signed: 3/10/03

Contractor: The Aerospace Corporation

Senior Vice President, General Counsel and Secretary

Business Address:

RECORDED: 05/14/2003

P.O. Box 92957, M1/040

Los Angeles, CA 90009

REEL: 014085 FRAME: 0520