- I P	
SUBSTITUTE RECORD 02-	11 - 2000 U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office
Patent and Trademark Office	
To the Honorable Commissioner Patents a	original documents or copy thereof.
1. Name of conveying party (ins):	z. Name and address of receiving party(ies):
ENVIRONMENTAL RESEARCH INSTITUTE OF	Name of the ite of Charles Air Causes
MICHIGAN (ERIM)	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
<ul> <li>☐ Assignment</li> <li>☐ Merger</li> <li>☐ Security Agreement</li> <li>☐ Change of Name</li> <li>☑ Other</li> </ul>	City: Wright-Patterson Air Force Base
	State: Ohio Zip: 45433-7109
Execution Date(s): 5 January 2000	
☑ This instrument should be recorded on the governmental register in accordance with 37 CFR 7.1(e)(1).	Additional name(s) & address(es) attached? 口 Yes 区 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):
08/898,989	
Additional numbers attached? ☐ Yes 図 No	
<ol><li>Name and address of party to whom correspondence concerning document should be mailed:</li></ol>	6. Total number of applications and patents involved:
Name: Fredric L. Sinder	
Internal Address: AFMC LO/JAZ	7. Total fee (37 CFR 3.41)\$0
Street Address: 2240 B Street, Room 100	☐ Enclosed ☒ Not applicable
	The instrument to be recorded is not an instrument affecting title (37 CFR 7.1(e)(2) and (j)).
City: Wright-Patterson Air Force Base	
State: <i>Ohio</i> ZIP: <i>45433-7109</i>	8. Deposit account number:
	(Attach duplicate copy of this page if paying by deposit account)
DO NOT USE THIS SPACE	
9. Statement and signature.	
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.	
	lanuary 31, 2000
Fredric L. Sinder	50.70
Name of person signing Signature Total number of pages including cover sheet, attachments, and document:  2	
Total number of pages including cover sheet, attachments, and document:	

PATENT REEL: 010534 FRAME: 0785

## CONFIRMATORY INSTRUMENT

NAME OF CONTRACTOR

Environmental Research Institute

of Michigan (ERIM) CONTRACT NO.

F33615-96-C-5511

ADDRESS OF CONTRACTOR

PO Box 134001

Ann Arbor, MI 48113-4001

TITLE OF INVENTION

Computerized System for Market Based Constraint Optimization

NAME OF INVENTOR

Dr. H. VanDyke Parunak

SERIAL NO.

08/898,989

FILING DATE

23 July1997

The invention identified above is a "Subject Invention" under Patent Rights Clause

Patent Rights-Retention By Contractor (Long Form) JUN 1989

(identify clause by title and date)

included in the above Contract No. with the United States Department of the Air Force. This document is confirmatory of the paid-up license granted to the Government under this contract in this invention, patent application, patent and any counterpart application throughout the world, and of all other rights acquired by the Government by the referenced Patent Rights Clause.

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

(seal)

BY (signature)

TITLE

Director of Customer Relations

Hanis

DATE OF EXECUTION

January 05, 2000

ATTEST

Dec. 1997

RECORDED: 02/07/2000

PATENT

REEL: 010534 FRAME: 0786