NRC FORM 250

THIS LICENSE EXPIRES 31 January 1993

United States of America

Nuclear Regulatory Commission

XT08692

Pursuant to the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974 and the regulations of the Nuclear Regulatory Commission issued pursuant thereto, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued

to the licensee authorizing the export of the materials and/or production or utilization facilities listed below, subject to the terms and conditions

LICENSEE

ULTIMATE CONSIGNEE IN FOREIGN COUNTRY

NAME Cerac, Incorporated

ADDRESS 1316 West St. Paul Avenue Milwaukee, WI 53233

Attn: Ervin Colton

NAME Balzers AG

ADDRESS Werk I, FL-9496 Balzers Liechtenstein

(For resale in Europe only to various customers for optical coating work.)

INTERMEDIATE CONSIGNEE IN FOREIGN COUNTRY

Natural AG

OTHER PARTIES TO EXPORT

NONE

Internationale Transporte ADDRESS Zurich, Switzerland

(For transport purposes only)

APPLICANT'S REF. NO Appl. dated 3 January 1990

COUNTRY OF ULTIMATE DESTINATION Liechtenstein

QUANTITY

DESCRIPTION OF MATERIALS OR FACILITIES

113.0 kgs.

Thorium

Contained in 150.0 kgs thorium flouride in granular form (for non-nuclear end use).

Neither this license nor any right under this license shall be assigned or otherwise transferred in violation of the provisions of the Atomic Energy Act of 1954, as amended and the Energy Reorganization Act of 1974.

This license is subject to the right of recepture or control by Section 108 of the Atomic Energy Act of 1954, as amended and to all of the other provisions of said Acts, now or hereafter in effect and to all valid rules and regulations of the Nuclear Regulatory Commission

THIS LICENSE IS INVALID UNLESS SIGNED BELOW BY AUTHORIZED NRC REPRESENTATIVE

Marvin R. Peterson, Assistant Director for International Security, Exports and Materials Safety International Programs

DATE OF ISSUANCE .

FEB 9

9002150080 900209 PDR XPORT PDC

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB 3150-0027 EXPIRES 12-31-90

APPLICATION FOR LICENSE TO EXPORT NUCLEAR MATERIAL AND EQUIPMENT (See Instructions on Reverse)

Complete if applicant is not supplied of material) Complete if applicant is not supplied of material) STATE TAPPEES, St. Paul Avenue Colty Milwaukee State 35233 Colty Milwaukee State 21PCODE Wil 53233 Colty State 21PCODE Wil 414) 289-9800 Effict Schieduled Schieduled Delivery date Schieduled Delivery date Per Customer per customer release 10. Ultimate consignee State 21PCODE ANAME Balzers AG Schieduled Delivery date Include pain or facility name) Balzers AG, Werk I, FL-9496 BALZERS Colty-State-Country Lichtenstein State 21PCODE Include pain or facility name) Balzers AG, Werk I, FL-9496 BALZERS Colty-State-Country Lichtenstein Include consignee Name Natural AG Street address Name Natural AG Na				APPLICANT'S REFER		+ 110002	the second second	XTO863	10	
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FAX# 414/289-9	Date_	Feb. 2, 1990			
Telex# 286122	(CERAC UR)	Page_	1	_ of _	1
Phone# 414/289	-9800				
ATTENTION OF:	Betty Wright	FAX#_	301-4	92-039	3
COMPANY NAME:	Office of International	Programs			
FROM:	Dr. Ervin Colton				
CERAC REF.#	5882				
MESSAGE:		R	EPLY:		

Dear Ms Wright:

This is to advise you that additional information below is given in addition to previous for our export license request, dated Jan. 3, 1990, for 113 kgs of contained thorium to Balzers Ltd. in Lichtenstein (Switzerland):

Balzers Ltd. is an old (50 years?) company producing vacuum equipment for optical coaters in addition to other similar industrial pieces. Our thorium fluoride is sold to them in small pieces packaged in small lots so that they do not handle it on receipt. They add their own labels and re-sell the material in small lots to coaters all over the world. Thorium fluoride is used primarily to coat lenses in lasers so that the light going through the lens is not absorbed. Thorium fluoride also is used with other materials to coat lenses for controlling light absorption. The thorium fluoride is evaporated in vacuum coaters, and the vapor condenses and coats a substrate, such as a lense. The final amounts of thorium fluoride on a given lense is in the millionths of an inch, in angstroms actually. The radiation thus coming from such a coated part is almost negligible.

I hope this helps you.

Sincerely yours,

Dr. Ervin Colton, Chairman and Chief Chemist

EXPORT IMPORT

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