

US00D497669S1

(12) **United States Design Patent** (10) **Patent No.:** **US D497,669 S**
Blanco (45) **Date of Patent:** **** Oct. 26, 2004**

(54) **SAFETY TROCAR WITH PROGRESSIVE CUTTING TIP GUARDS AND GAS JET TISSUE DEFLECTOR**

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(**) Term: **14 Years**

(21) Appl. No.: **29/144,096**

(22) Filed: **Jun. 27, 2001**

Related U.S. Application Data

(62) Division of application No. 09/598,453, filed on Jun. 21, 2000.

(51) **LOC (7) Cl.** **24-02**

(52) **U.S. Cl.** **D24/146**

(58) **Field of Search** D24/146, 147, D24/140, 130; 606/185, 169, 167, 170, 184; 604/164.06, 164.01, 264, 164.11

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,527,291	A	2/1925	Zorraquin
2,623,521	A	12/1952	Shaw
2,630,803	A	3/1953	Baran
3,039,468	A	6/1962	Price
3,090,384	A	5/1963	Baldwin et al.
3,713,447	A	1/1973	Adair
3,774,604	A	11/1973	Danielsson
3,789,852	A	2/1974	Kim et al.
4,168,699	A	9/1979	Hauser
4,177,814	A	12/1979	Knepshield et al.
4,403,617	A	9/1983	Tretinyak

(List continued on next page.)

FOREIGN PATENT DOCUMENTS

SU 921554 4/1982

OTHER PUBLICATIONS

Ethicon News, Less Invasive Surgical Techniques Inspire New Ethicon* Products, Sep./Oct. 1990, vol. 38.

Freudenheim, Milt, *The New York Times*, Business Day, The Tiniest, Kindest Cut of All/Small Incisions Make Surgeries Cheaper, Wednesday, Jul. 10, 1991.

Shenot, Christine, *Investor's Daily*, New Surgery: Faster, Cheaper, Less Painful, Monday, Sep. 10, 1990.

Winslow, Ron, *The Wall Street Journal, Eastern Edition*, Cutting Edge: A Tiny TV Camera Is Transforming Gallbladder Surgery. vol. CCXVI No. 113, Monday, Dec. 10, 1990.

Brehm, Denise. *MIT Tech Talk*, New Instrument Aims to Make Endoscopic Surgery Safer, vol. 44, No. 26. Apr. 5, 2000.

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(57) **CLAIM**

The ornamental design for a safety trocar with progressive cutting tip guards and gas jet tissue deflector, as shown and described.

DESCRIPTION

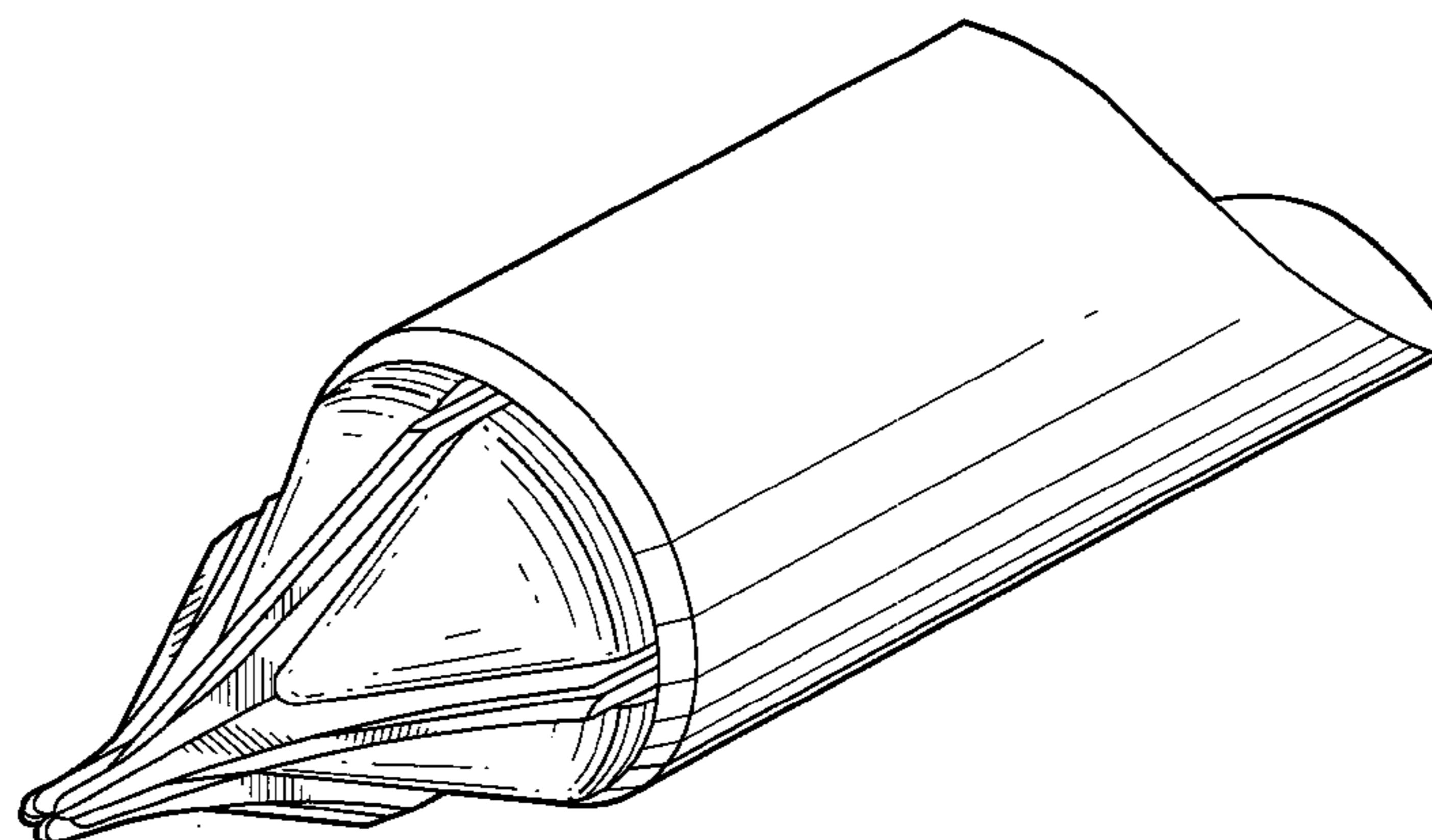
FIG. 1 is a perspective view as seen from the top, front right side, of a safety trocar with progressive cutting tip guards and gas jet tissue deflector showing my design, the bottom, left and front perspective view being a mirror image thereof, wherein the cutting blade is shown in a guarded position;

FIG. 2 is a perspective view as seen from the top, front right side thereof, the bottom, left and front perspective view being a mirror image thereof, wherein the cutting blade is shown in a partially exposed position;

FIG. 3 is a perspective view as seen from the top, front right side thereof, the bottom, left and front perspective view being a mirror image thereof, wherein the cutting blade is shown in a fully exposed position, with the guards retracted; and,

FIG. 4 is a perspective view as seen in FIG. 1, the broken line showing is for illustrative purposes only and forms no part of the claimed design.

1 Claim, 3 Drawing Sheets



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U.S. PATENT DOCUMENTS

4,431,426 A	2/1984	Groshong et al.	5,152,754 A	10/1992	Plyley et al.
4,491,132 A	1/1985	Aikins	5,295,993 A	3/1994	Green
4,535,773 A	8/1985	Yoon	5,318,580 A	6/1994	Gresl, Jr.
4,556,059 A	12/1985	Adamson, Jr.	5,318,585 A	6/1994	Guy et al.
4,601,710 A	7/1986	Moll	5,320,610 A	6/1994	Yoon
4,654,030 A	3/1987	Moll et al.	5,372,588 A	12/1994	Farley et al.
4,747,831 A	5/1988	Kulli	D362,066 S	* 9/1995	Petruschke et al. D24/146
4,808,168 A	2/1989	Warring	D364,924 S	* 12/1995	Medema D24/146
4,813,426 A	3/1989	Haber et al.	5,569,160 A	10/1996	Sauer et al.
4,902,280 A	2/1990	Lander	5,609,604 A	* 3/1997	Schwemberger et al. 604/164.01
4,906,236 A	3/1990	Alberts et al.	5,618,297 A	* 4/1997	Hart et al. 606/185
4,922,602 A	5/1990	Mehl	5,797,943 A	* 8/1998	Danks et al. 606/185
4,931,042 A	6/1990	Holmes et al.	5,807,338 A	* 9/1998	Smith et al. 604/164.01
4,952,207 A	8/1990	Lemieux	5,882,340 A	3/1999	Yoon
5,030,206 A	7/1991	Lander	6,030,402 A	2/2000	Thompson et al.
5,066,288 A	11/1991	Deniega et al.	D443,360 S	* 6/2001	Haberland D24/146
5,104,382 A	4/1992	Brinkerhoff et al.	6,319,266 B1	* 11/2001	Stellon et al. 606/185
5,114,407 A	5/1992	Burbank			
5,116,353 A	5/1992	Green			

* cited by examiner

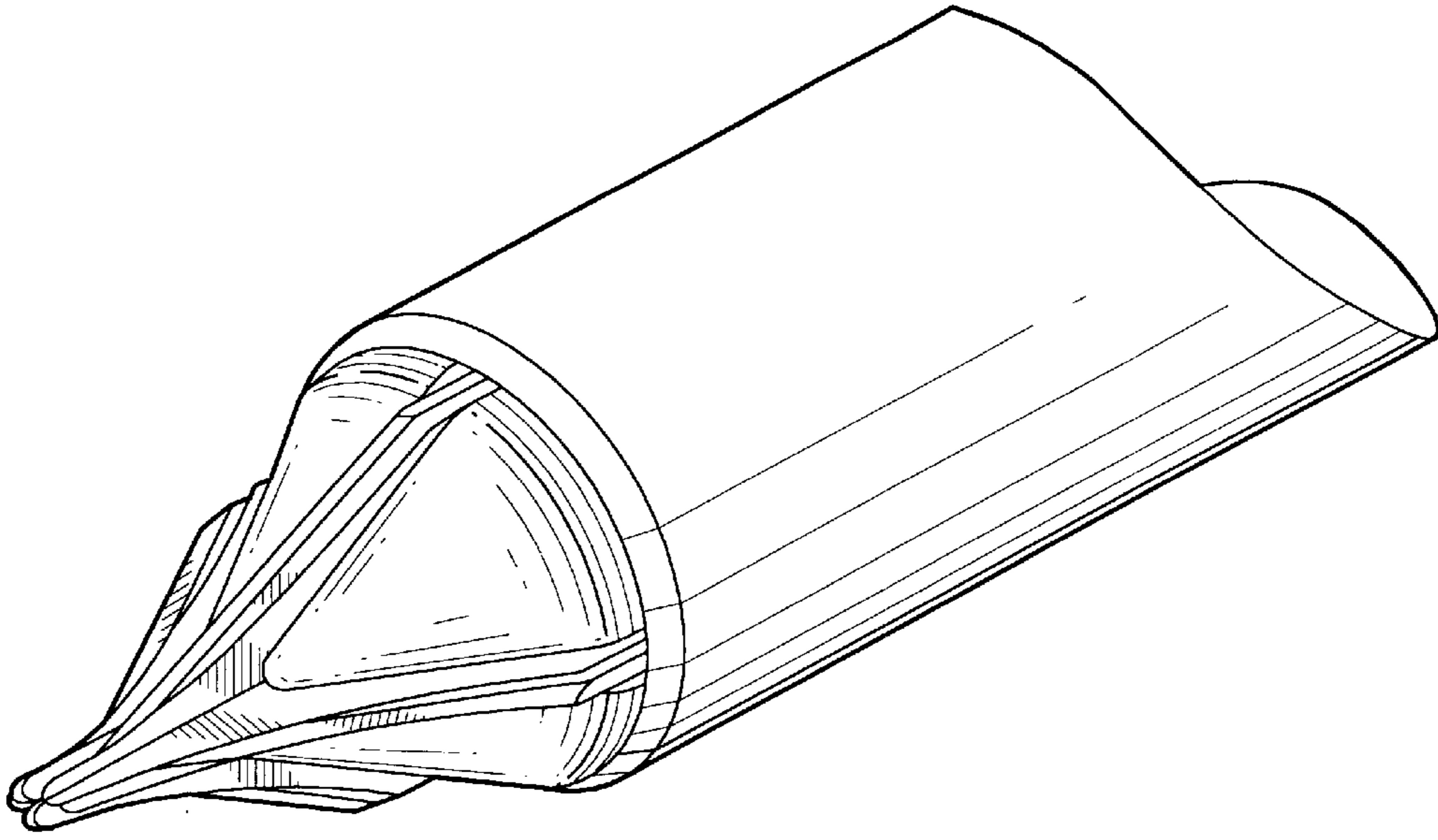


FIG. 1

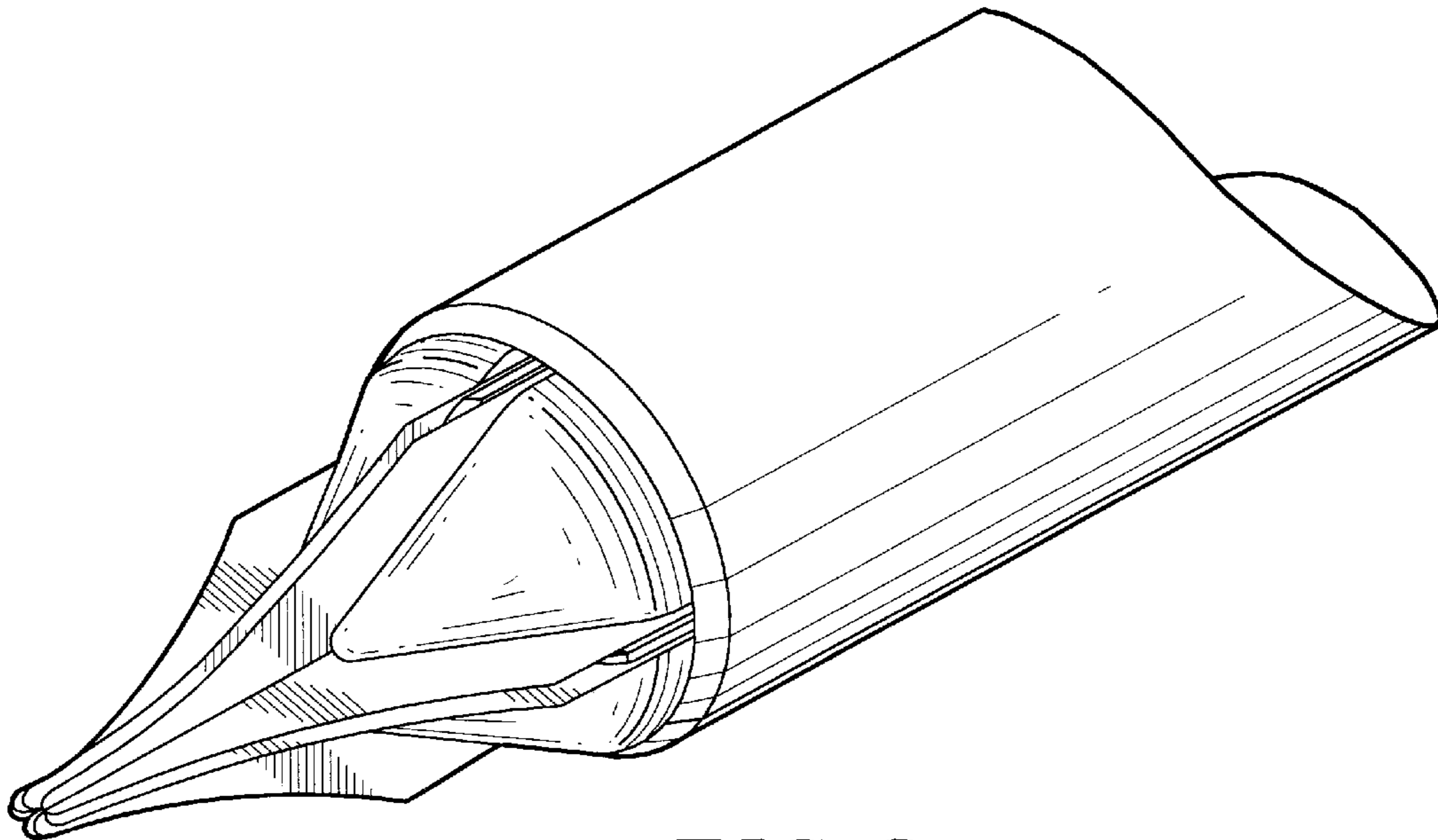


FIG. 2

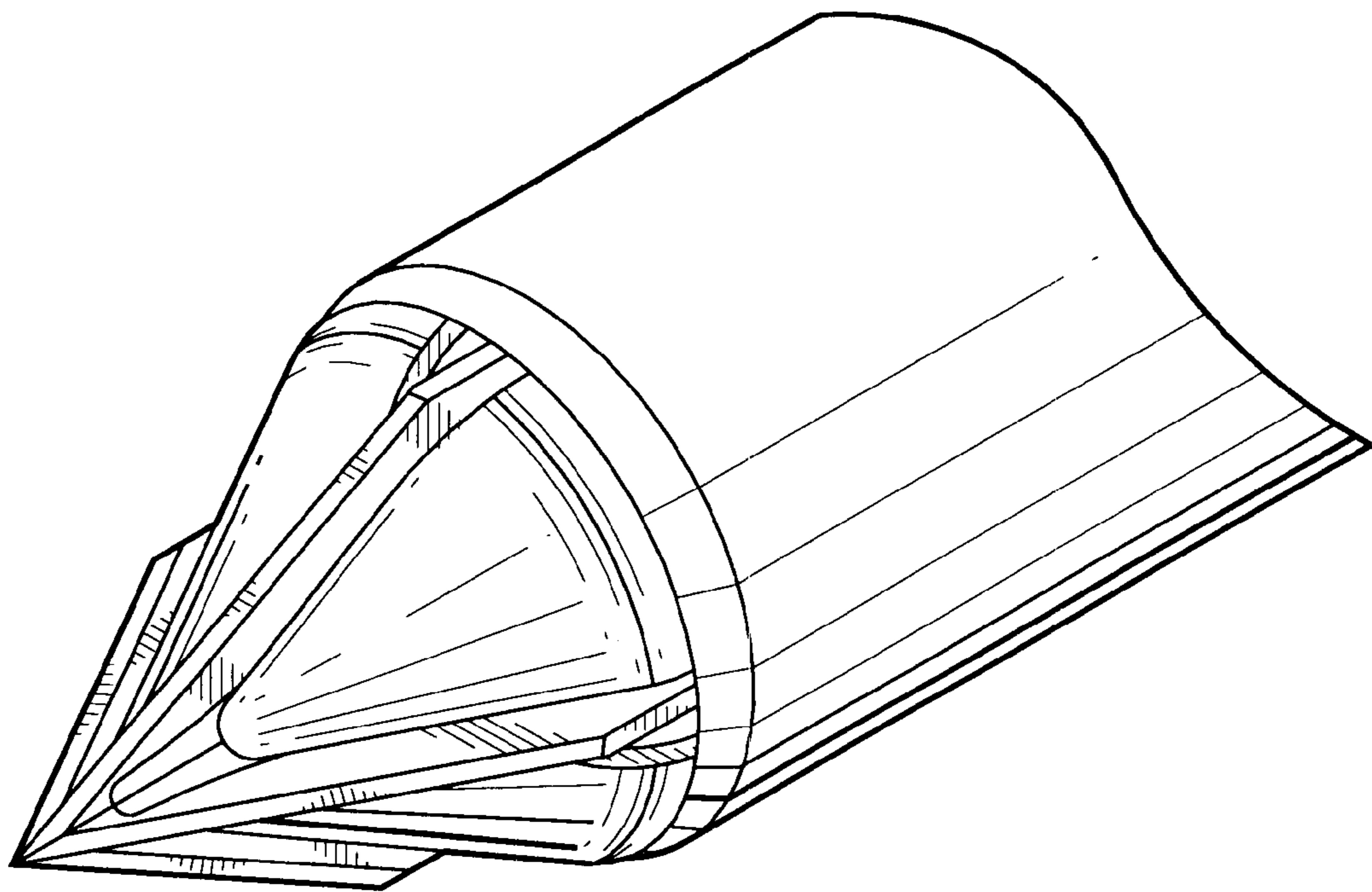


FIG. 3

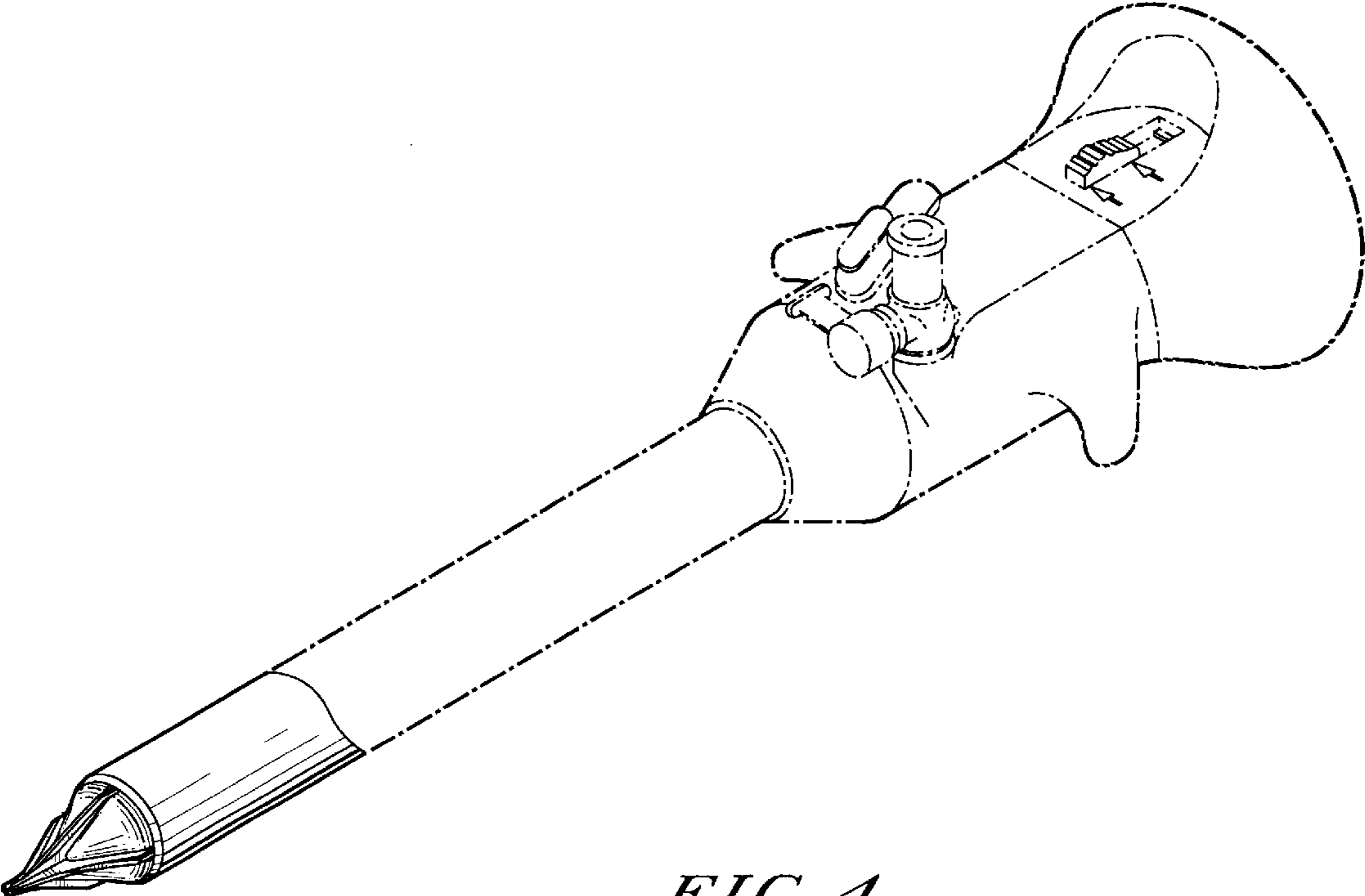


FIG. 4

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : Des. 497,669 S
DATED : October 26, 2004
INVENTOR(S) : Blanco

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title page,

Item [62], **Related U.S. Application Data**, should read:

-- **Related U.S. Application Data**

[62] Division of application No. 09/598,453, filed on Jun. 22, 2000. --

Signed and Sealed this

First Day of February, 2005

A handwritten signature in black ink on a light gray dotted background. The signature reads "Jon W. Dudas" in a cursive style.

JON W. DUDAS

Director of the United States Patent and Trademark Office