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(12) **United States Design Patent**  
**Wickliffe**

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(45) **Date of Patent:** **\*\* Apr. 17, 2007**

(54) **PAIR OF BICYCLE CHAIN RINGS**

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

(21) Appl. No.: **29/254,870**

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(51) **LOC (8) Cl.** ..... **12-11**

(52) **U.S. Cl.** ..... **D12/123**

(58) **Field of Classification Search** ..... D12/111,  
D12/122-124; 474/152, 202, 155-158, 160-164  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

4,519,791	A	5/1985	Nagano
5,066,264	A	11/1991	Romano
5,078,653	A	1/1992	Nagano
5,413,534	A	5/1995	Nagano
5,437,582	A	8/1995	Romano
5,609,536	A	3/1997	Hsu
5,738,603	A	4/1998	Schmidt et al.
5,782,712	A	7/1998	Campagnolo
5,876,296	A	3/1999	Hsu et al.
5,935,034	A	8/1999	Campagnolo
6,340,338	B1	1/2002	Kamada
6,572,500	B2	6/2003	Tetsuka
6,666,786	B2	12/2003	Yahata
6,923,741	B2	8/2005	Wei

**OTHER PUBLICATIONS**

<http://www.raceface.com/components/chainrings/racing-s.htm>.

[http://bike.shimano.com/publish/content/cycle/sac/us/en/technical\\_service/shimano\\_technology/front\\_shifting\\_technology.html](http://bike.shimano.com/publish/content/cycle/sac/us/en/technical_service/shimano_technology/front_shifting_technology.html).

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(57) **CLAIM**

The ornamental design for a pair of bicycle chain rings, as shown and described.

**DESCRIPTION**

FIG. 1 is an inside plan view of a 44 tooth large bicycle chain ring of the pair of bicycle chain rings, shown separately for clarity;

FIG. 2 is an outside plan view of FIG. 1;

FIG. 3 is an inside perspective view of FIG. 1;

FIG. 4 is a close-up inside perspective view of a FIG. 3, shown for clarity;

FIG. 5 is an inside plan view of a 32 tooth middle bicycle chain ring of the pair of bicycle chain rings, shown separately for clarity;

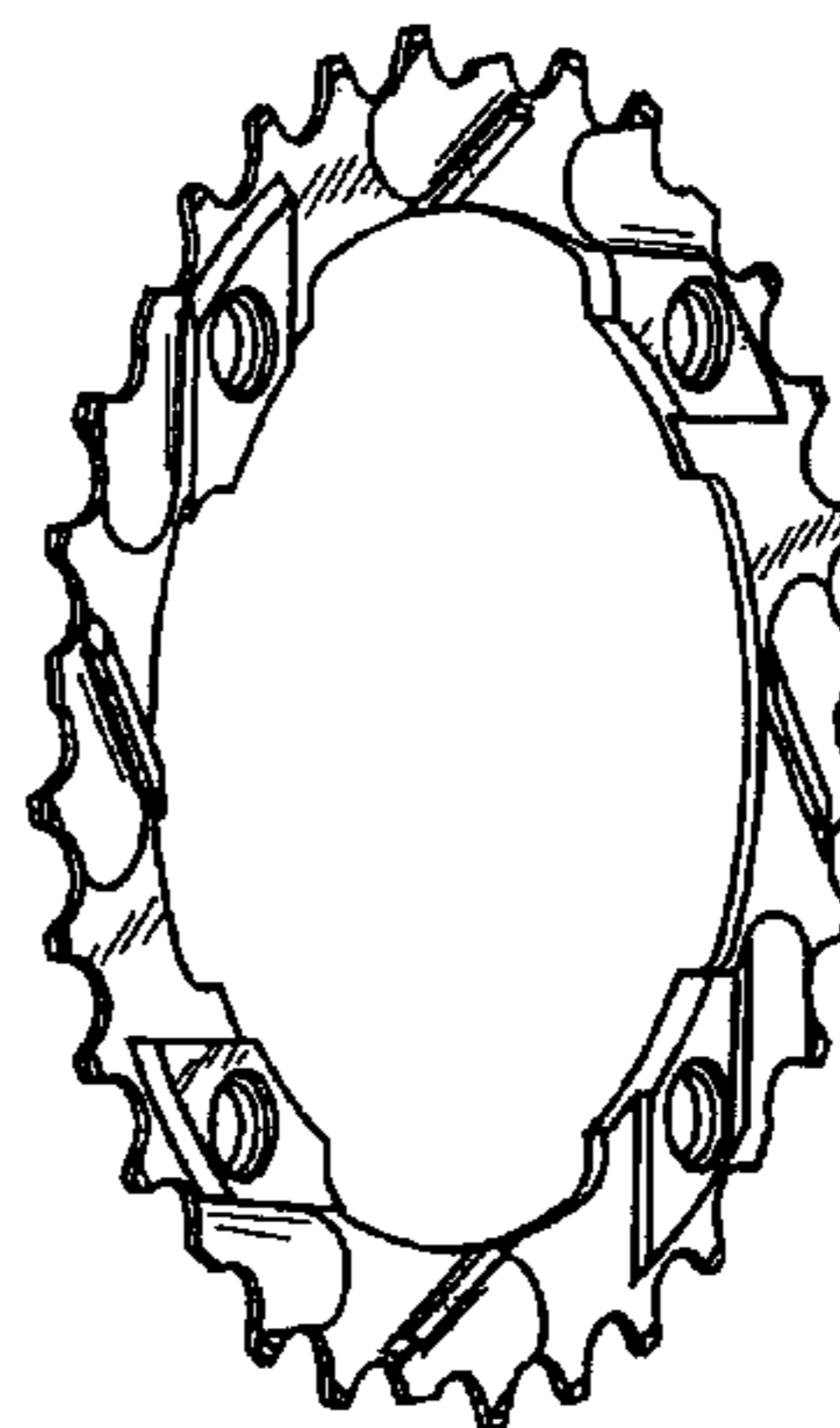
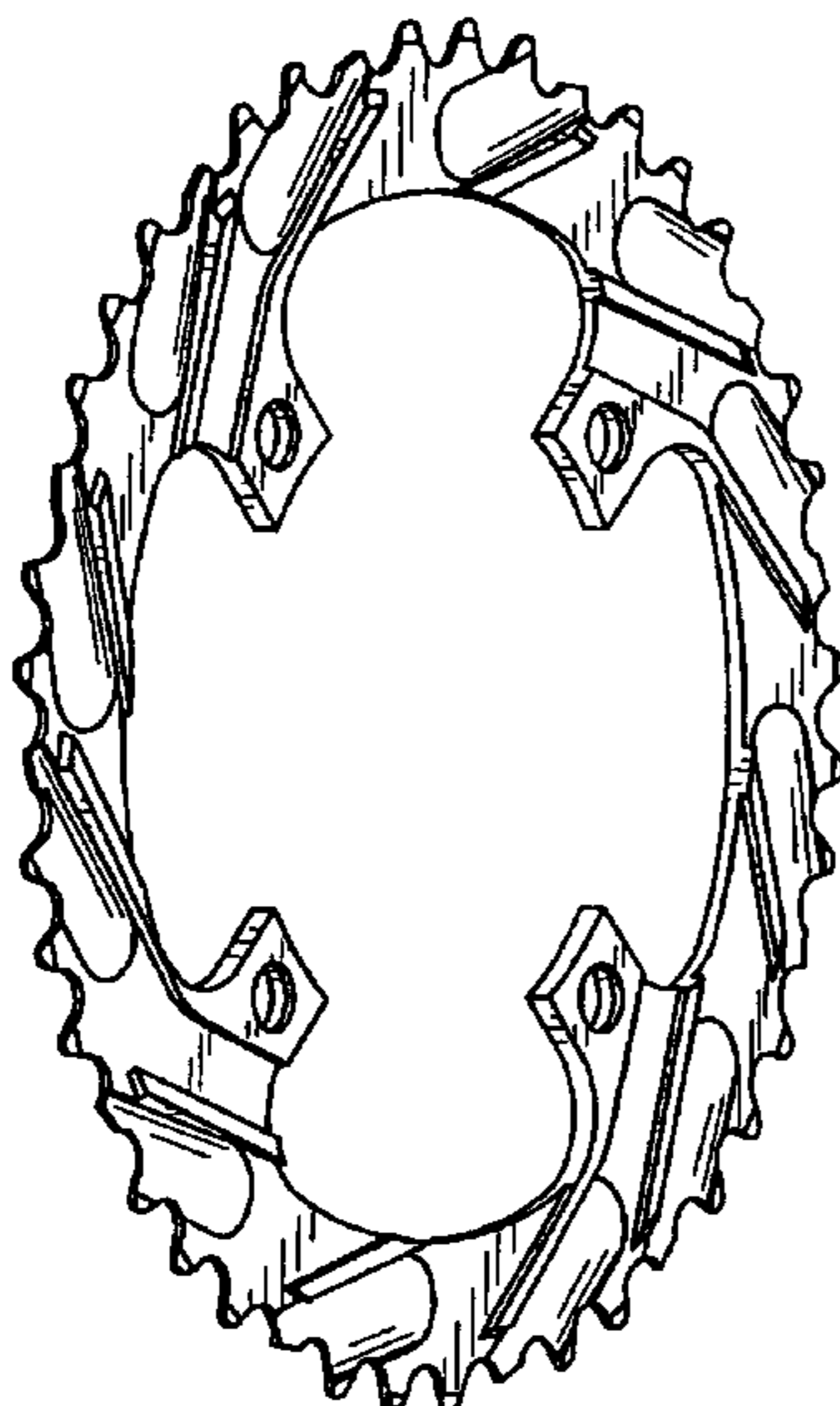
FIG. 6 is an outside plan view of FIG. 5;

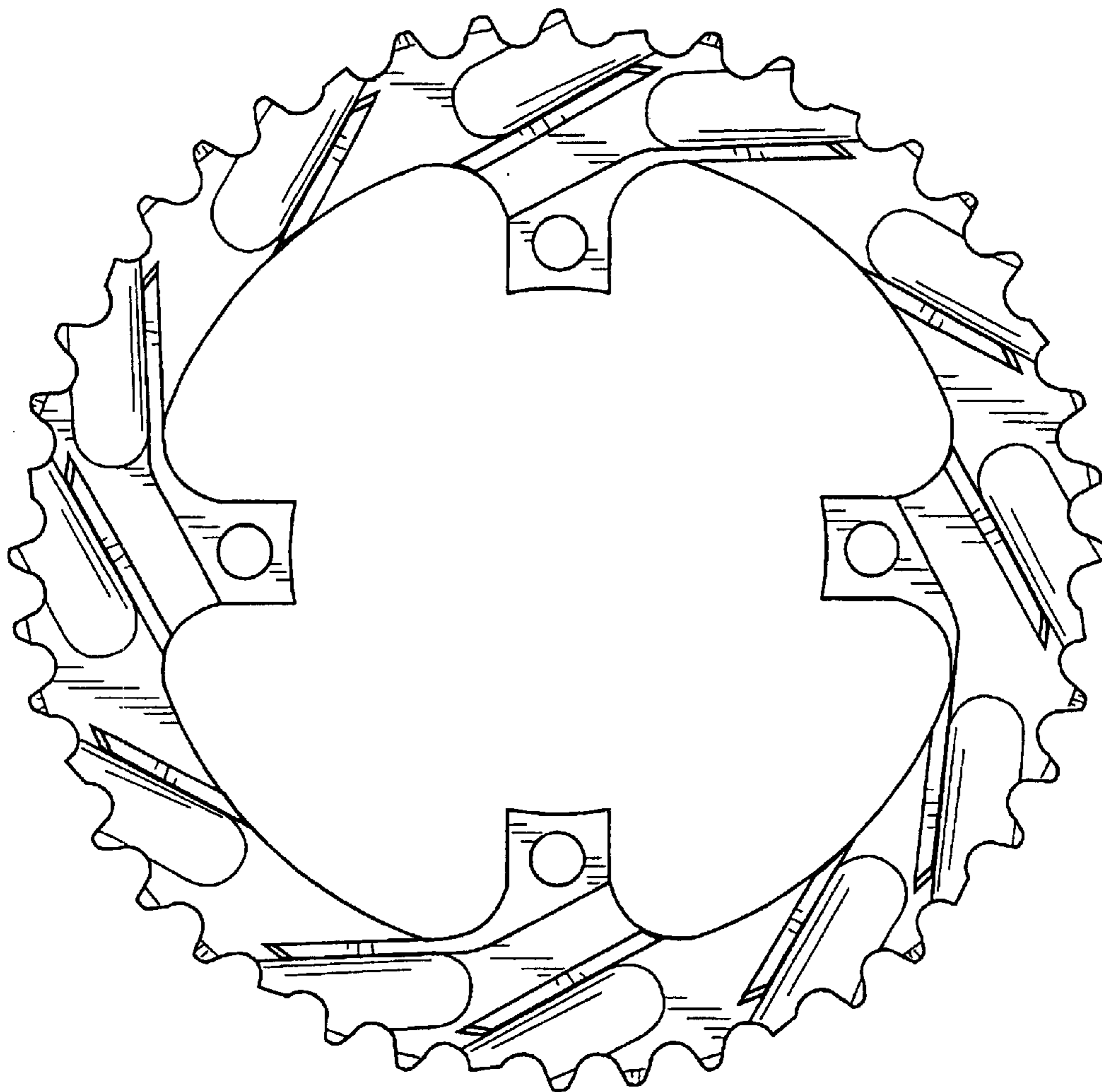
FIG. 7 is an inside perspective view of FIG. 5;

FIG. 8 is a close-up inside perspective view of a portion of FIG. 7, shown for clarity; and,

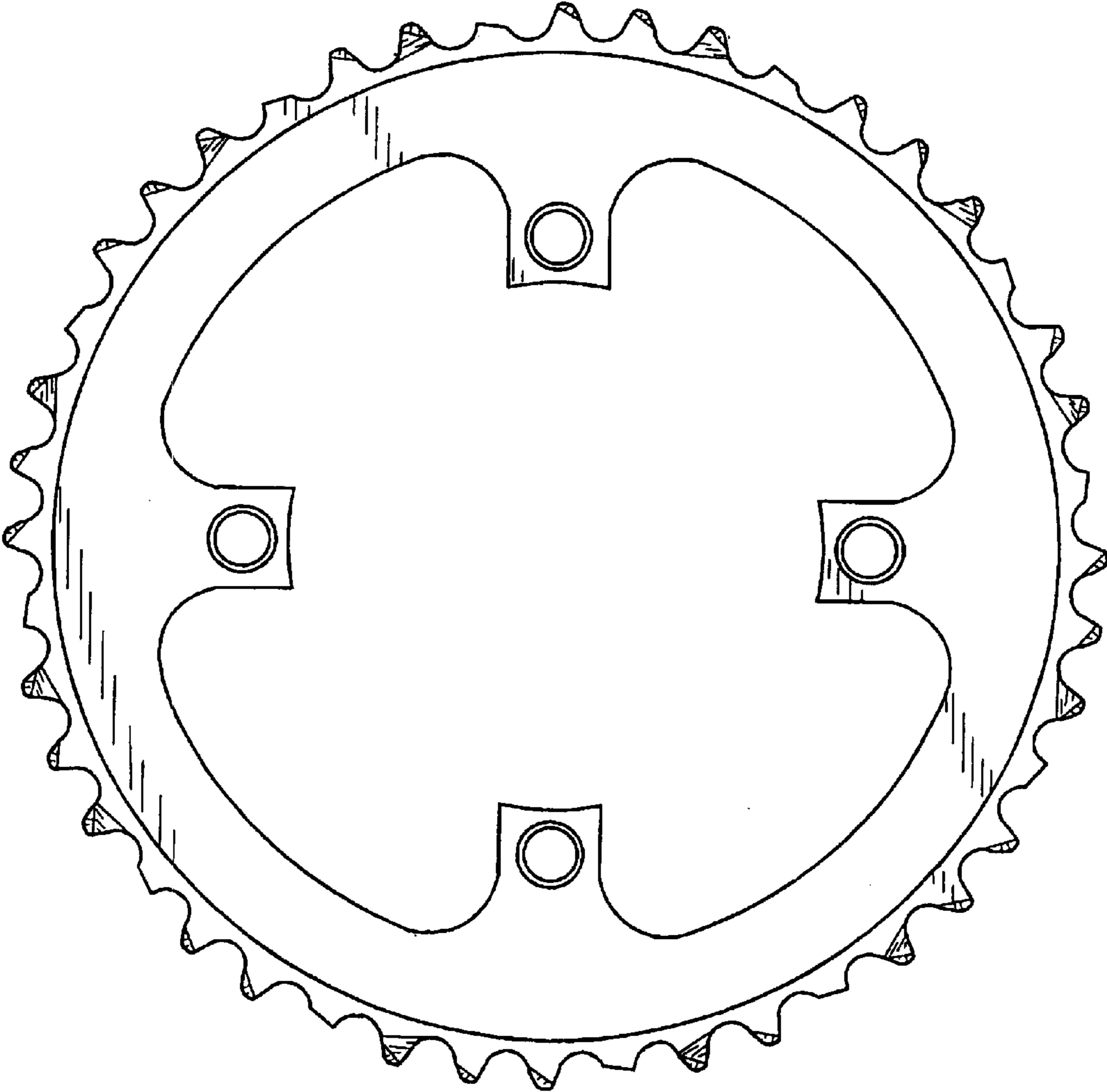
FIG. 9 is an exploded perspective view of the pair of bicycle chain rings.

**1 Claim, 7 Drawing Sheets**

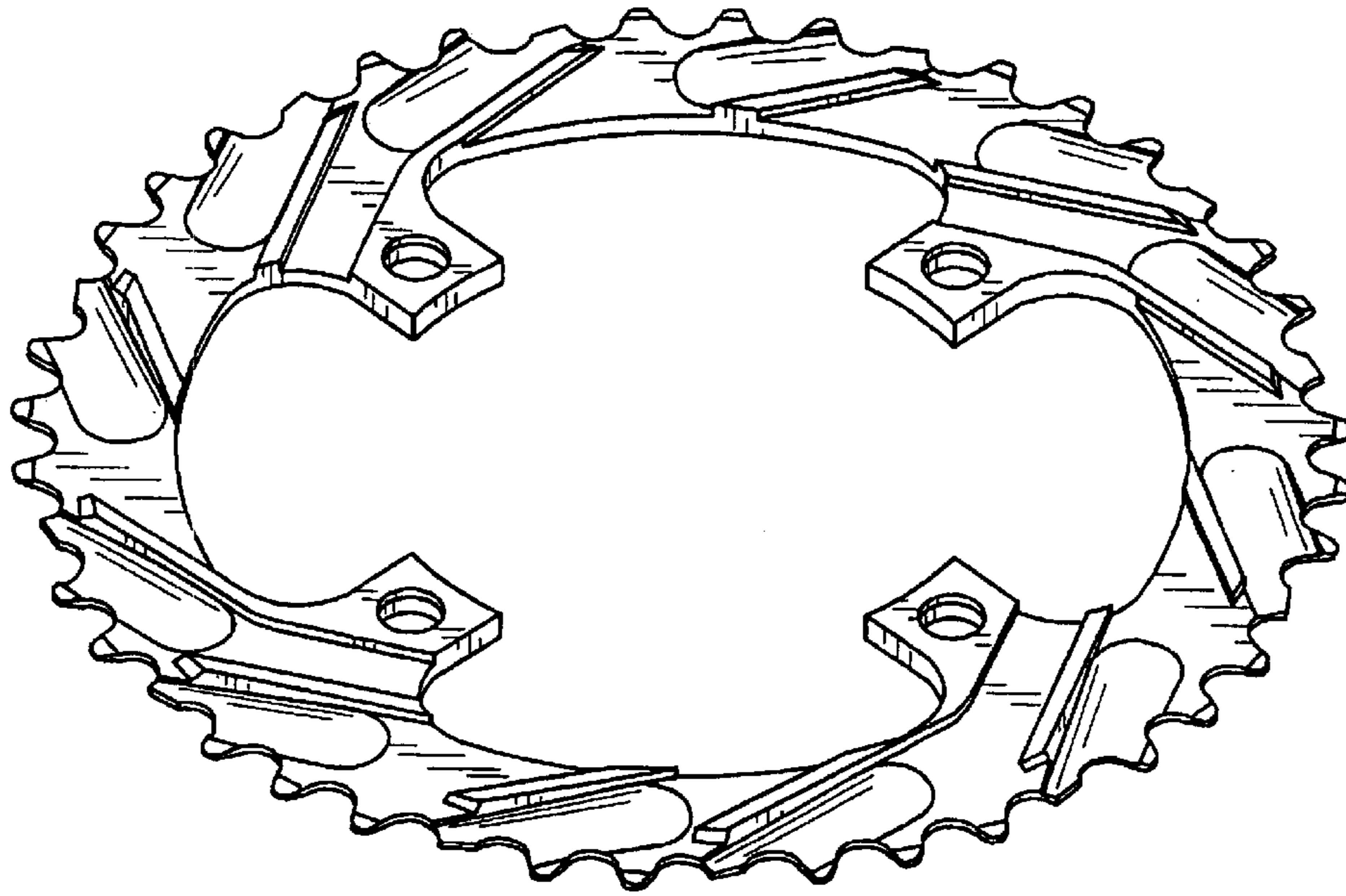




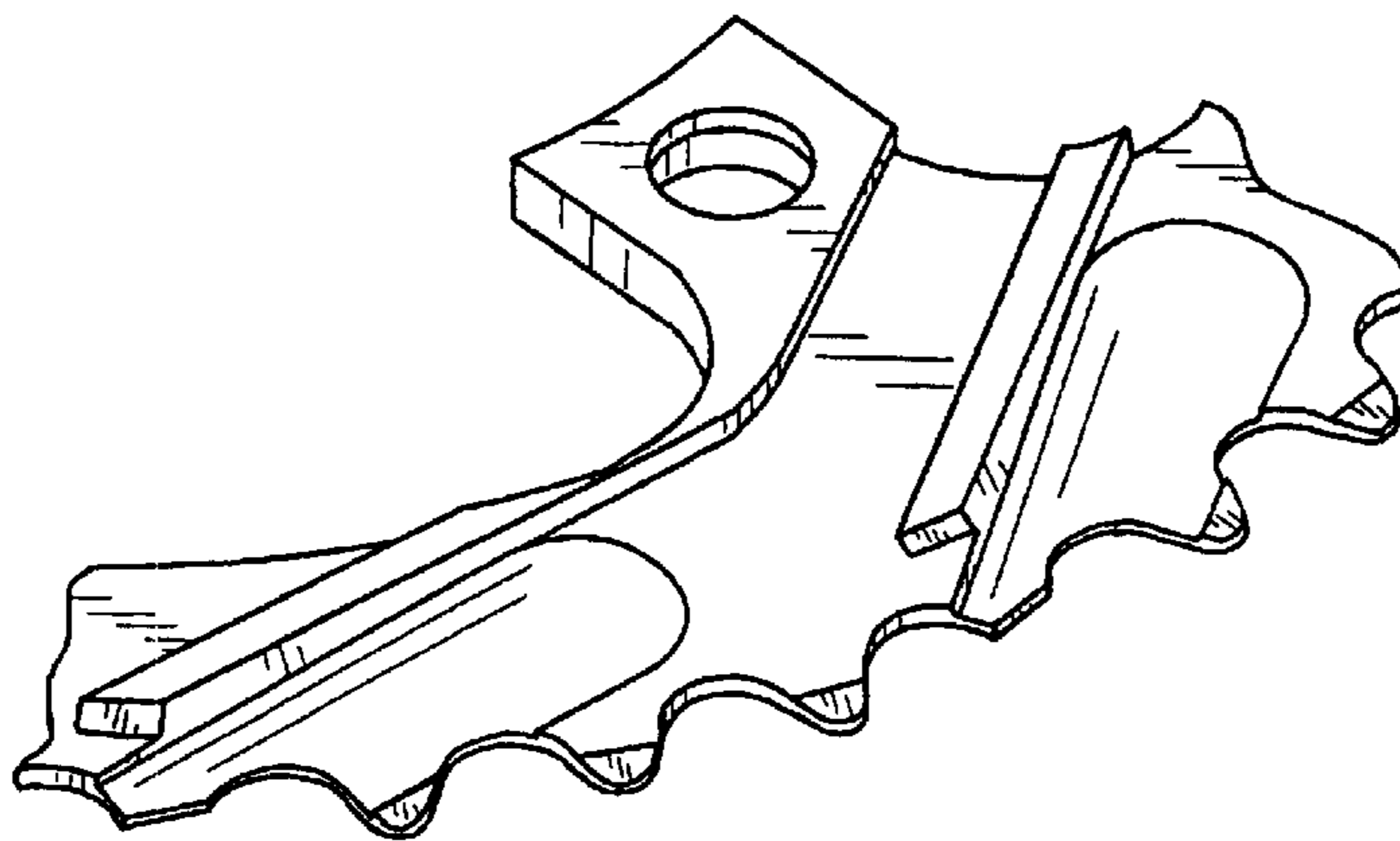
**FIG. 1**



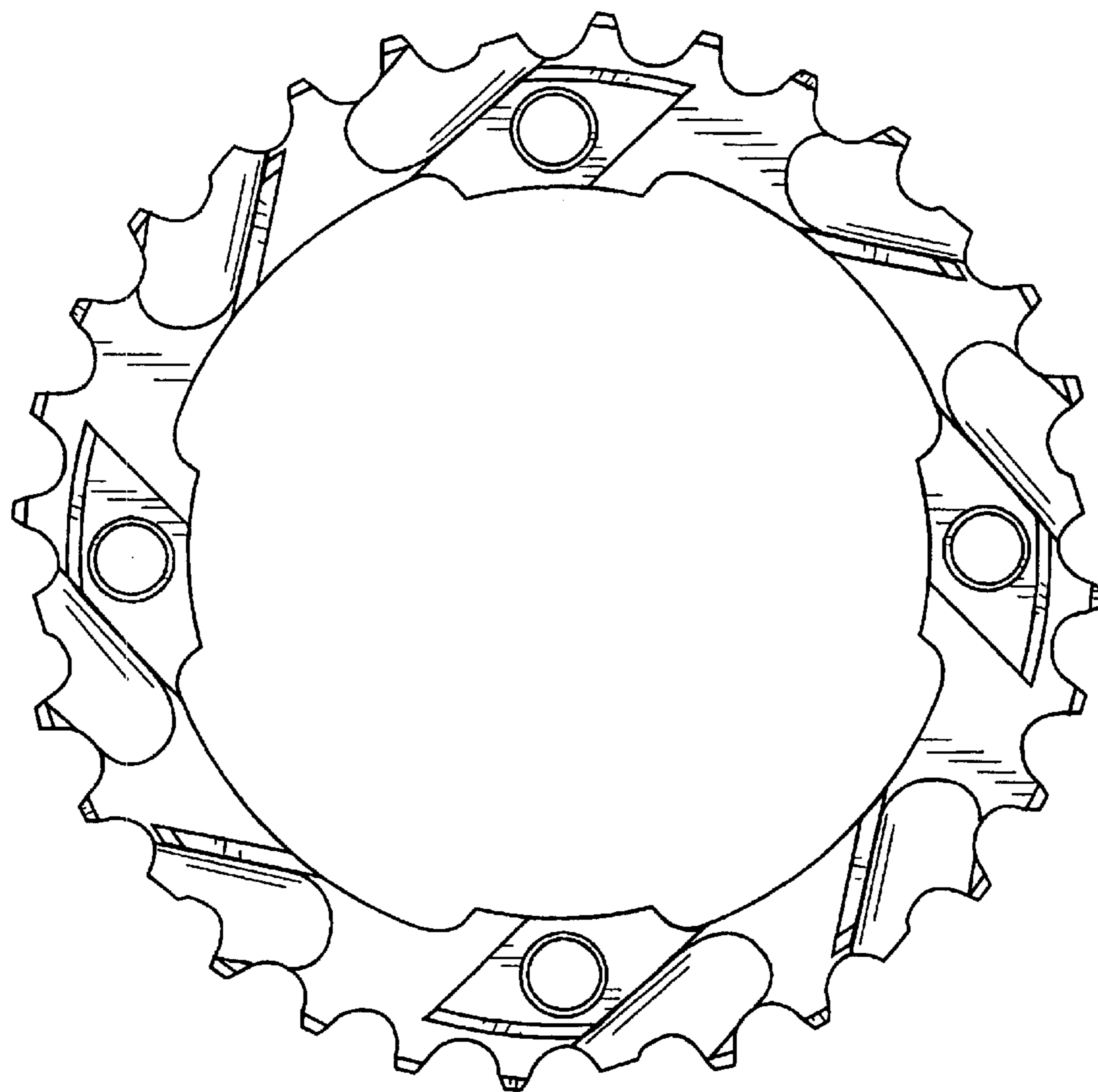
**FIG. 2**



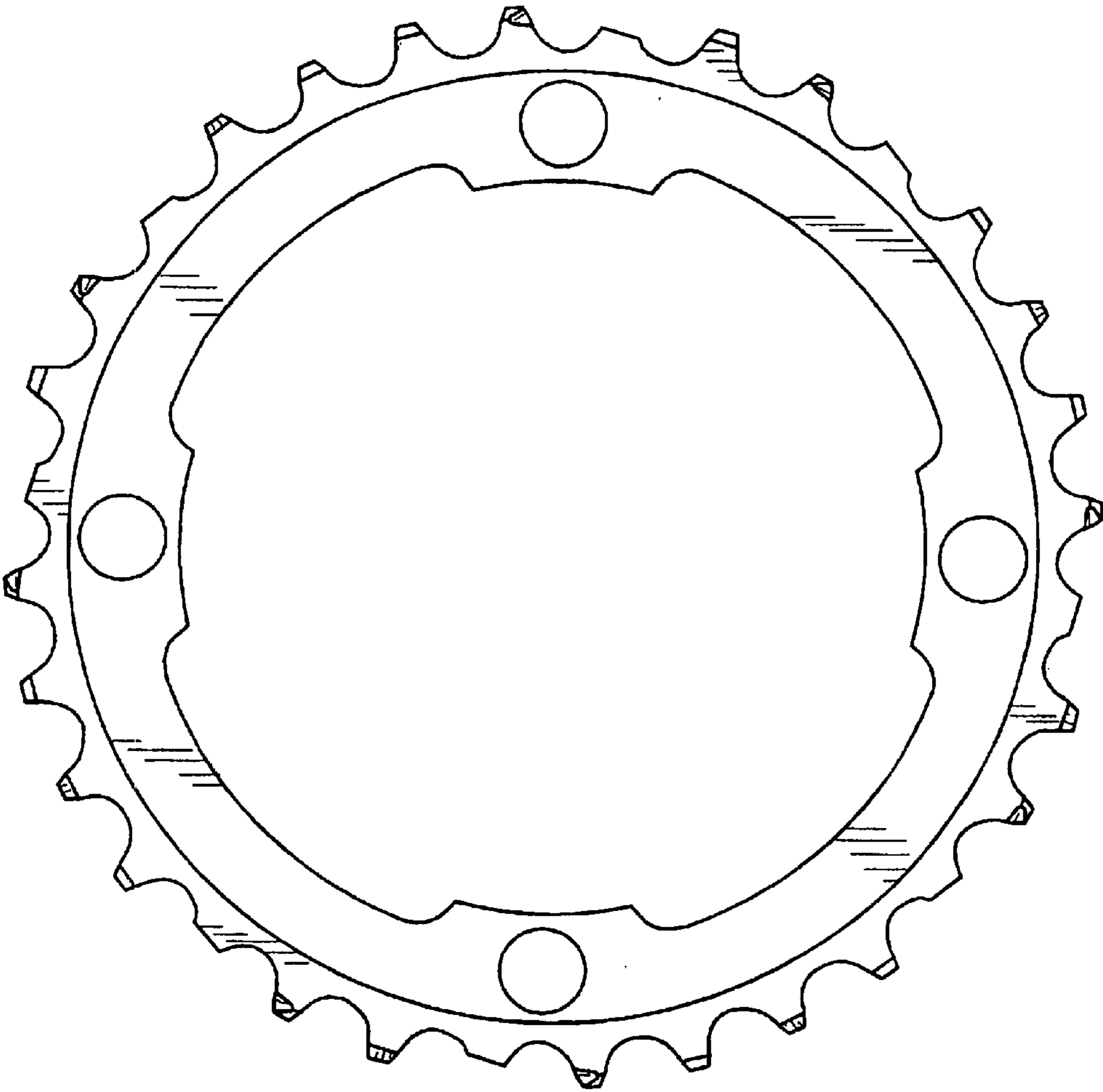
**FIG. 3**



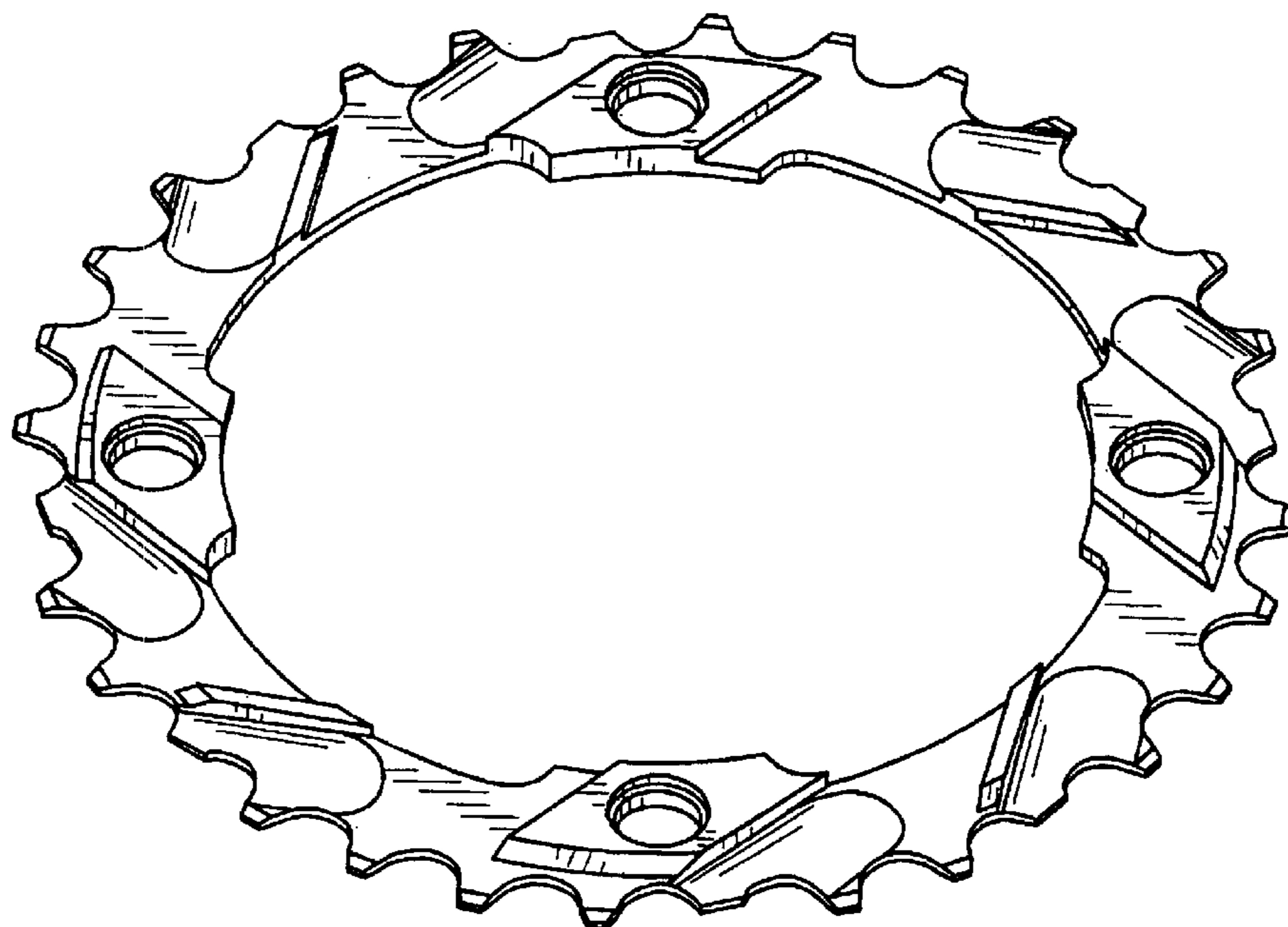
**FIG. 4**



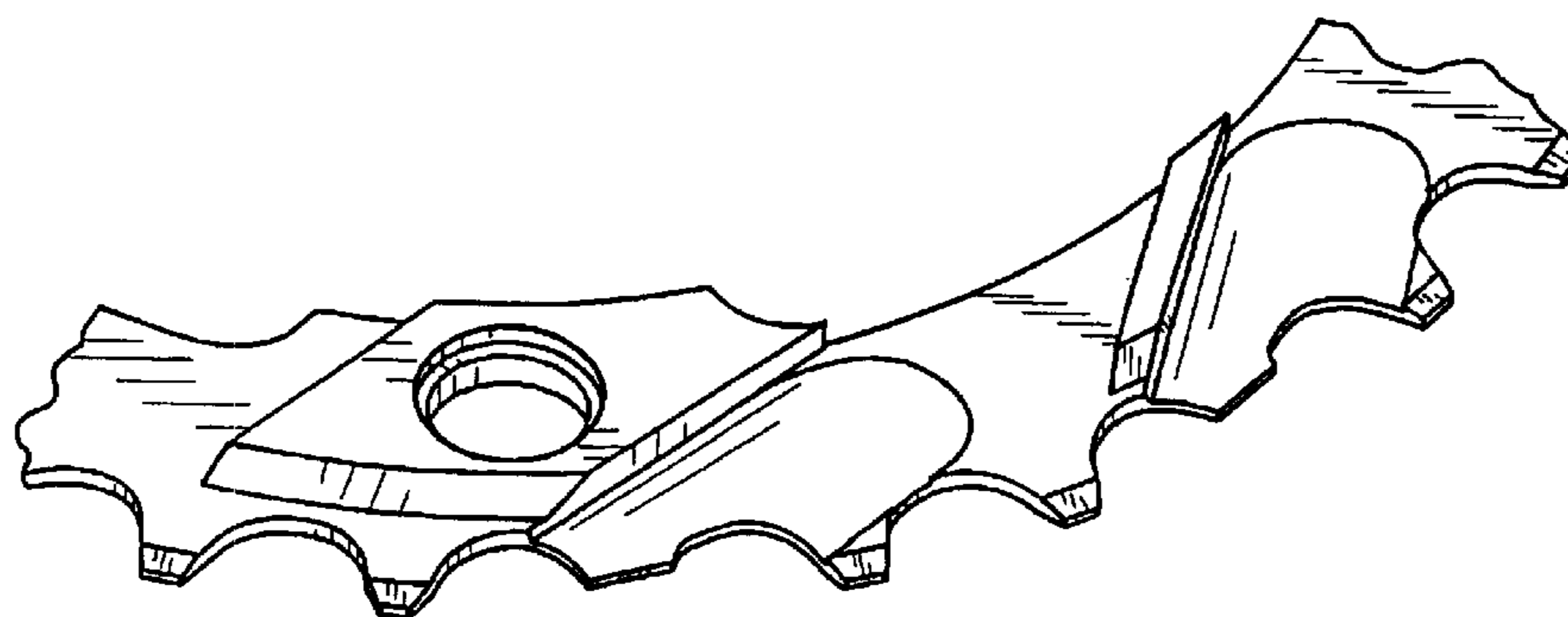
**FIG. 5**



**FIG. 6**



**FIG. 7**



**FIG. 8**

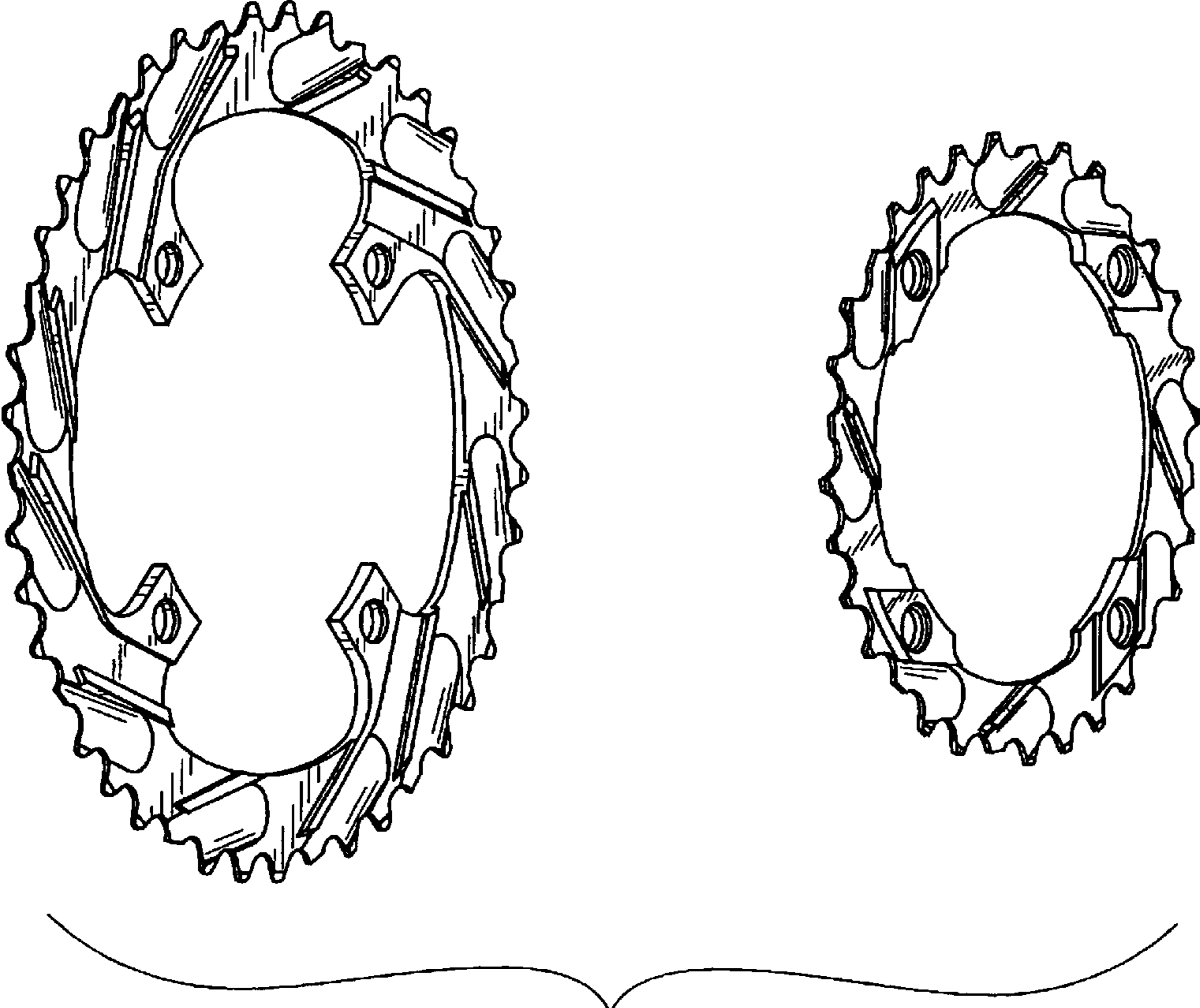


FIG. 9