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(12) **United States Design Patent**  
**Hall et al.**

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(54) **DIAMOND ENHANCED CUTTING ELEMENT**

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**Related U.S. Application Data**

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(51) **LOC (8) Cl.** ..... **15-09**

(52) **U.S. Cl.** ..... **D15/139**

(58) **Field of Classification Search** ..... D8/70; D15/127, 131, 132, 138, 139, 140; D9/445, D9/454; 83/845; 403/331, 381; 407/9, 407/33, 34, 42, 54, 63, 110, 113, 114, 115; 408/210-214, 219, 224, 226-230, 240  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

2,124,438 A	7/1938	Struk	
3,254,392 A	6/1966	Novkov	
4,098,362 A	7/1978	Bonnice	
4,109,737 A	8/1978	Bovenkerk	
4,156,329 A	5/1979	Daniels	
4,199,035 A	4/1980	Thompson	
4,201,421 A	5/1980	Den Besten	
4,211,508 A *	7/1980	Dill et al. ....	407/120
4,268,089 A	5/1981	Spence	

D264,217 S *	5/1982	Prause et al. ....	D15/138
4,439,250 A	3/1984	Acharya	
4,465,221 A	8/1984	Schmidt	
4,484,783 A	11/1984	Emmerich	
4,684,176 A	8/1987	Den Besten	
4,776,862 A	10/1988	Wiand	
4,880,154 A	11/1989	Tank	
D305,871 S *	2/1990	Geiger .....	D9/435
4,932,723 A	6/1990	Mills	
4,940,288 A	7/1990	Stiffler	
4,944,559 A	7/1990	Sionnet	
4,951,762 A	8/1990	Lundell	
5,007,685 A	4/1991	Beach	
D324,056 S *	2/1992	Frazee .....	D15/139
D324,226 S *	2/1992	Frazee .....	D15/139
5,112,165 A	5/1992	Hedlund	
5,141,289 A	8/1992	Stiffler	
D329,809 S *	9/1992	Bloomfield .....	D9/443
5,186,892 A	2/1993	Pope	
5,251,964 A	10/1993	Ojanen	
5,303,984 A	4/1994	Ojanen	
D357,485 S *	4/1995	Mattsson et al. ....	D15/139
D371,374 S *	7/1996	Fischer et al. ....	D15/139
5,533,582 A *	7/1996	Tibbitts .....	175/430

(Continued)

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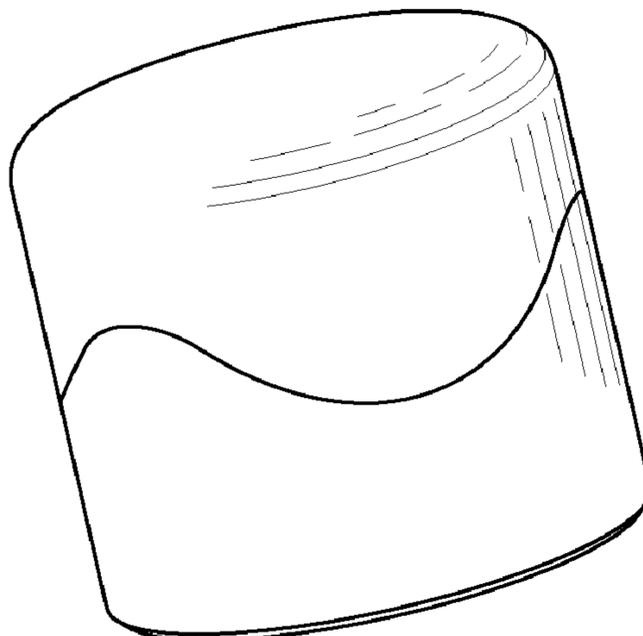
(57) **CLAIM**

The ornamental design for a diamond enhanced cutting element, as shown and described.

**DESCRIPTION**

FIG. 1 is a top perspective view of the element.  
FIG. 2 is bottom perspective view of the element.  
FIG. 3 is a side view of the element; and,  
FIG. 4 is an opposing side view of the element.

**1 Claim, 1 Drawing Sheet**



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U.S. PATENT DOCUMENTS					
5,720,528	A	2/1998 Ritchey	6,702,393	B2	3/2004 Mercier
5,738,698	A	4/1998 Kapoor	D494,031	S *	8/2004 Moore, Jr. .... D8/29
5,837,071	A	11/1998 Andersson	D494,064	S *	8/2004 Hook ..... D9/454
5,884,979	A	3/1999 Latham	6,786,557	B2	9/2004 Montgomery
5,934,542	A	8/1999 Nakamura	6,802,676	B2 *	10/2004 Noggle ..... 407/113
5,935,718	A	8/1999 Demo	6,861,137	B2	3/2005 Hughes et al.
5,944,129	A	8/1999 Jensen	6,889,890	B2	5/2005 Yamazaki
6,051,079	A	4/2000 Andersson	D547,652	S *	7/2007 Kerman et al. .... D9/438
6,065,552	A	5/2000 Scott	2002/0074851	A1	6/2002 Montgomery
6,113,195	A	9/2000 Mercier	2002/0153175	A1	10/2002 Ojanen
6,193,770	B1	2/2001 Sung	2002/0175555	A1	11/2002 Mercier
6,199,956	B1	3/2001 Kammerer	2003/0140350	A1	7/2003 Noro
6,332,503	B1 *	12/2001 Pessier et al. .... 175/336	2003/0234280	A1	12/2003 Cadden
6,478,383	B1	11/2002 Ojanen	2004/0026983	A1	2/2004 McAlvain
6,481,803	B2	11/2002 Ritchey	2005/0159840	A1	7/2005 Lin
6,561,293	B2 *	5/2003 Minikus et al. .... 175/420.1	2006/0060391	A1 *	3/2006 Eyre et al. .... 175/434
D477,225	S *	7/2003 Pinnavaia ..... D9/454	2006/0086540	A1 *	4/2006 Griffin et al. .... 175/434

\* cited by examiner

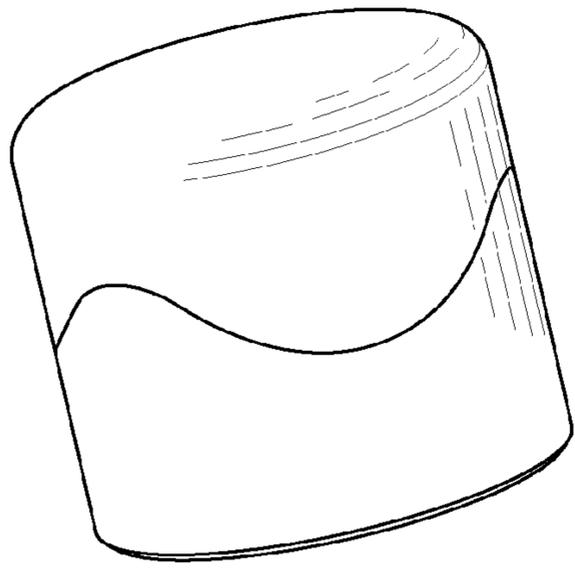


Fig. 1

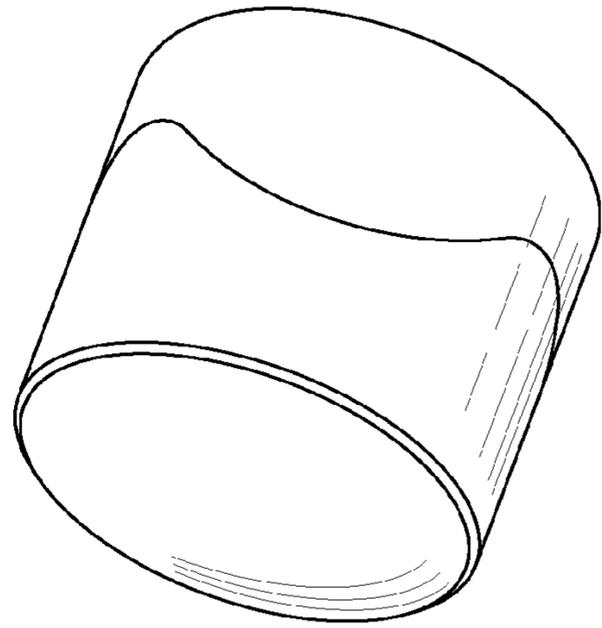


Fig. 2

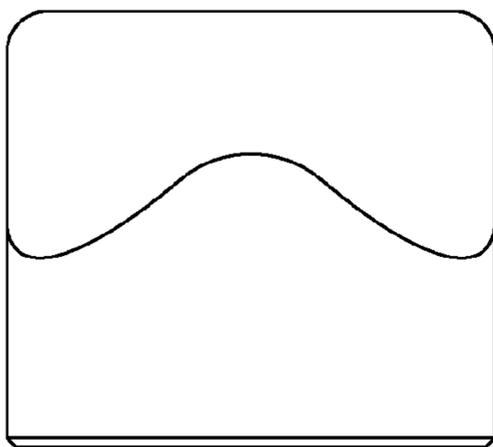


Fig. 3

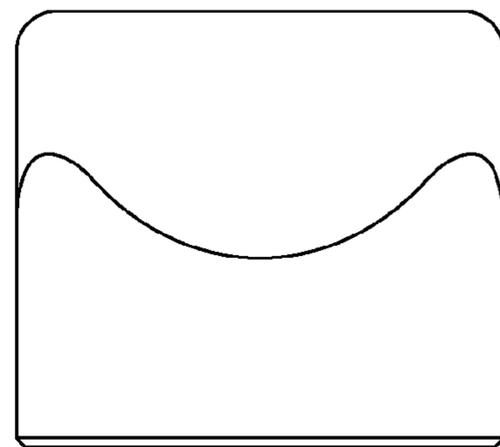


Fig. 4