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Broadaway et al.

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(54) **HEX WRENCH TOOL HANDLE**

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See application file for complete search history.

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(56) **References Cited**

U.S. PATENT DOCUMENTS

1,172,656	A	2/1916	Yorgensen	
2,465,619	A *	3/1949	Veit	81/177.1
2,530,914	A *	11/1950	Simmons	81/489
2,569,069	A	9/1951	Motel	
4,566,357	A *	1/1986	Carossino	81/436
5,765,454	A *	6/1998	Barbulescu et al.	81/177.1
6,510,766	B1 *	1/2003	Lin	81/439
7,946,203	B2	5/2011	Johnson et al.	
2011/0162490	A1	7/2011	Chang	

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* cited by examiner

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(57) **ABSTRACT**

A tool handle for releasably receiving a tool including a core portion having a base portion and a cylindrical shaft portion extending outwardly therefrom, the base portion including a first surface, a second surface, and an outer wall extending therebetween, the outer wall defining a first bore therein, and a grip portion rotatably disposed about the shaft portion of the core. The first bore is configured to releasably receive a first portion of the tool.

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B25G 1/06 (2006.01)

(52) **U.S. Cl.**

CPC . **B25G 1/00** (2013.01); **B25G 1/063** (2013.01)

(58) **Field of Classification Search**

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7 Claims, 2 Drawing Sheets

