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(54) **HIGH SHEAR PRESSURE SENSITIVE  
ADHESIVE COMPOSITION**

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See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,526,577 A 7/1985 Schmidt et al.

4,944,993 A	7/1990	Raykovitz et al.
5,019,071 A	5/1991	Bany et al.
5,028,646 A	7/1991	Miller et al.
5,057,571 A	10/1991	Malcolm et al.
5,149,741 A	9/1992	Alper et al.
5,559,165 A *	9/1996	Paul ..... 523/111
6,232,391 B1 *	5/2001	Sambasivam et al. .... 524/505
6,288,149 B1	9/2001	Kroll
6,391,960 B1	5/2002	Sambasivam et al.
6,531,544 B1 *	3/2003	Vaughan et al. .... 525/89
2005/0176867 A1	8/2005	He et al.

FOREIGN PATENT DOCUMENTS

WO WO93/23488 11/1993

\* cited by examiner

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(57) **ABSTRACT**

A hot melt pressure sensitive adhesive composition includes ABA block copolymer(s), a midblock resin, a plasticizer, and optionally, an endblock resin. The A block is derived from styrene and B block is derived from butadiene or its hydrogenated version. The block copolymer(s) has an average styrene content of from about 15% to about 35%, an average diblock content of no less than about 20%, and an average solution viscosity of less than about 1,000 cps.

**20 Claims, No Drawings**