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[54] DENTINAL DESENSITIZING COMPOSITIONS

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[58] **Field of Search** 424/49–58

[56] **References Cited**

U.S. PATENT DOCUMENTS

2,975,102	3/1961	Matsumura et al.	167/93
3,978,206	8/1976	Naumann et al.	424/49
4,296,096	10/1981	Pierce	424/52
4,847,070	7/1989	Pyrz et al.	424/52
4,871,531	10/1989	Hartlaub et al. .	
4,906,456	3/1990	Gaffar et al.	424/52
4,931,273	6/1990	Gaffar et al.	424/52
4,933,171	6/1990	Bristow et al.	424/57
4,965,067	10/1990	Wietfeldt	424/52
4,992,258	2/1991	Mason	424/49
5,013,541	5/1991	Elliott et al.	424/52
5,015,466	5/1991	Parran et al.	424/52
5,015,467	5/1991	Smitherman	424/52
5,017,363	5/1991	Suhonen	424/52
5,032,386	7/1991	Gaffar et al.	424/49
5,087,444	2/1992	Jackson et al.	424/49
5,139,768	8/1992	Friedman	424/49
5,160,737	11/1992	Friedman et al.	424/49
5,188,818	2/1993	Merianos et al. .	

FOREIGN PATENT DOCUMENTS

200508	12/1986	European Pat. Off.	514/902
278744	8/1988	European Pat. Off.	424/52
354447	2/1990	European Pat. Off.	424/52
390456	10/1990	European Pat. Off.	424/52

OTHER PUBLICATIONS

"Evaluation of Tartar Control Dentrifices in In Vitro Models of Dentin Sensitivity" by Dr. S. Mason et al., Clinical Preventive Dentistry, vol. 12, No. 6, Jan. 1991.

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[57] **ABSTRACT**

A composition containing a water soluble or water swellable polyelectrolyte or salts thereof in a dentifrice base or other oral compositions which can be used for relieving pain and discomfort caused by hypersensitive teeth. The salts can be single or mixed partial salts of the polyelectrolyte.

11 Claims, No Drawings