

[54] **SOFT CONTACT LENS FROM A
MACROMOLECULAR BLOCK
COPOLYMER**

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FOREIGN PATENT DOCUMENTS

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[57] **ABSTRACT**

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B29D 11/00**

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264/1**

[58] Field of Search **351/160; 260/29.6 TA,
260/29.6 R; 264/1**

The invention relates to a new type of soft contact lens from a hydrophilic, swelled copolymer, with high swelling capacity, high permeability for oxygen, comparatively high strength and low modulus of elasticity, said characteristics making the lens suitable for permanent wearing. The lens contains, at swelling equilibrium with water at 20° C, from about 50 to about 95% by weight of water, preferably from about 70 to about 90%, and consists of a multiblock copolymer of acrylonitrile with acrylamide, containing, if desired, a minor amount of other monomer units, not exceeding 20 molar percent. The swelled hydrogel contains two distinct but inseparable phases, one of them being polyacrylonitrile detectable by X-ray analysis, the other being amorphous highly solvated hydrophilic polymer containing predominantly acrylamide units.

[56] **References Cited**

U.S. PATENT DOCUMENTS

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5 Claims, No Drawings