

Title (en)  
ENVIRONMENT RESPONSIVE GELLING COPOLYMER

Title (de)  
UMWELTREAGIERENDES GELCOPOLYMER

Title (fr)  
COPOLYMERE GELIFIANT REAGISSANT A L'ENVIRONNEMENT

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Application  
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Abstract (en)  
[origin: WO0168768A1] The invention relates to a gelable copolymer composition comprising a copolymer in a solvent. The copolymer has the structure A(B)<sub>n</sub>, wherein the core (A) is soluble in the solvent, the arms (B) are convertible between soluble and insoluble in the solvent depending on an environmental condition, and n > 1. The composition forms a gel under environmental conditions in which B is insoluble, through formation of B aggregates. Block copolymers comprising polyethylene glycol (PEG) and poly(N-isopropylacrylamide) (PNIPAAm) having a liquid form at ambient temperature under aqueous conditions and a gel form at body temperature are disclosed. Copolymer compositions according to the invention can be used to form *in situ* implants useful in slow-release formulations of biologically active molecules.

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