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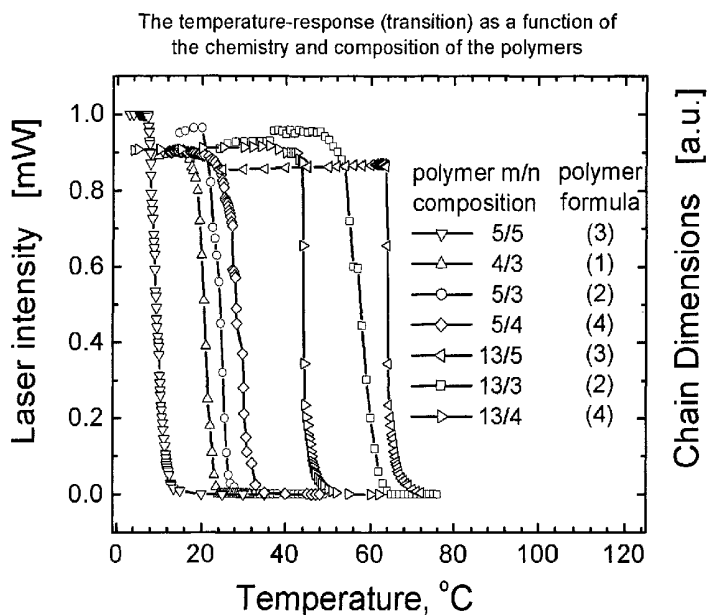
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(54) Title: METHOD FOR CONTROL OF TEMPERATURE-SENSITIVITY OF POLYMERS IN SOLUTION



(57) Abstract: Temperature sensitive, water soluble polymers are disclosed, together with a method for control the LCST of the polymer. The polymers include hydrophilic components and hydrophobic components joined by linking groups such as ester or amide groups wherein the hydrophilic components includes m ethylene oxide groups, the hydrophobic components consist of aliphatic groups such as n ethylenes and/ or cycloaliphatic groups, and where  $1 \leq m \leq 30$  and  $1 \leq n \leq 30$ . Substrates bearing the grafted temperature responsive polymers also are disclosed. Microfluidic devices which include the temperature responsive polymers also are disclosed.

WO 03/078947 A2



**Declarations under Rule 4.17:**

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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations*
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