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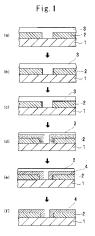
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## (54) WATER-SOLUBLE RESIN COMPOSITION FOR THE FORMATION OF MICROPATTERNS AND PROCESS FOR THE FORMATION OF MICROPATTERNS WITH THE SAME

A process which comprises applying a watersoluble resin composition comprising a water-soluble vinyl resin, a compound having at least two amino groups in the molecule, a solvent, and, if necessary, an additive such as a surfactant on a resist pattern (2) formed on a substrate (1) to form a water-soluble resin film (3), modifying part of the water-soluble resin film adjacent to the resist pattern through mixing to form a water-insolubilized layer (4) which cannot be removed by water washing on the surface of the resist pattern, and removing unmodified part of the water-soluble resin film by water washing and which enables the effective scale-down of separation size and hole opening size of a resist pattern to a level finer than the limit of resolution of the wave length of exposure. It is preferable to use as the water-soluble vinyl resin a homopolymer of a nitrogen-containing vinyl monomer such as acrylamine, vinylpyrrolidone or vinylimidazole, a copolymer of two or more nitrogen-containing vinyl monomers, or a copolymer of at least one nitrogencontaining vinyl monomer and at least one nitrogen-free vinyl monomer.



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