

Abstract

METHOD FOR MANUFACTURING A NANOLITHOGRAPHY MASK

The invention concerns a manufacturing method for nanolithography masks from a
5 PS-b-PMMA block copolymer film (20) deposited on a surface (10) to be etched, said
copolymer film comprising PMMA nanodomains (21) orientated perpendicularly to the
surface to be etched, said method being characterized in that it comprises the
following steps:

- partially irradiating (E1) said copolymer film to form a first irradiated area and a
10 second non-irradiated area in said copolymer film, then
- treating (E2) said copolymer film in a developer solvent to selectively remove at
least said PMMA nanodomains of said first irradiated area of said copolymer film.

FIG. 1