

etching contrast, and also the production of porous membranes or else as catalyst support.

5 | ~~Summary of the invention:~~

~~The invention relates to~~In an aspect, there is provided a nanostructured assembly process using a composition comprising a block copolymer, at least one of the blocks of which is crystallizable or has at least one liquid crystal
10 | phase, and comprising the following steps:

- dissolving the block copolymer in a solvent,
- depositing this solution on a surface,
- annealing.

15 | In another aspect, there is provided the use of the process as defined above, in the field of lithography, or more generally in the field of surface nanostructuring for electronics.

20 | In another aspect, there is provided a mask of block copolymer obtained by the process as defined above.

Detailed description:

25 | The term "surface" is understood to mean a surface which can be flat or non-flat.

The term "annealing" is understood to mean a step of
30 | heating at a certain temperature that enables the evaporation of the solvent, when it is present, and that allows the establishment of the desired nanostructuring in a given time (self-assembly). The term "annealing" is also

understood to mean the establishment of the nanostructuring of the block copolymer film when said film is subjected to a controlled atmosphere of one or more solvent vapors, these vapors giving the polymer chains sufficient mobility
5 to become organized by themselves on the surface. The term "annealing" is also understood to mean any combination of the abovementioned two methods.