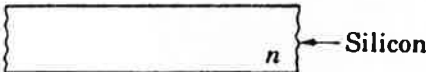
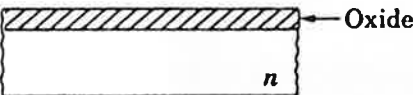
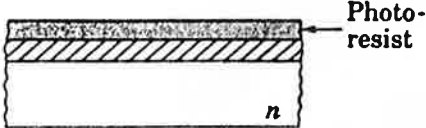
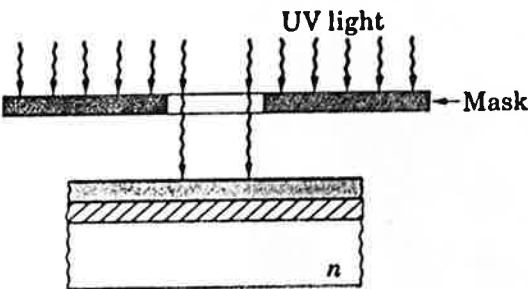
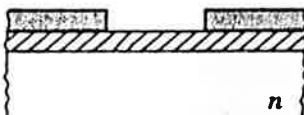
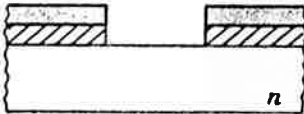
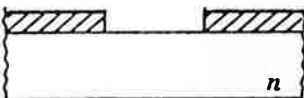
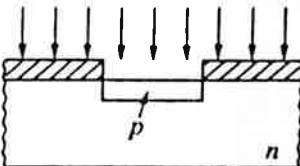
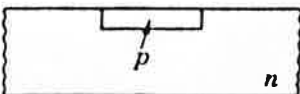


Example: Processing of a p -type region in n -type silicon

Imagine you wished to create a p -type region within a sample of n -type silicon. Draw cross-sections of the sample at each processing step in order to accomplish this (see Fig. 34.9).

SOLUTION

	Cross-Section	Description
a)		Sample of n -type silicon
b)		Grow silicon dioxide by oxidation.
c)		Apply photoresist.
d)		Expose photoresist using appropriate lithographic mask.
e)		Develop photoresist.
f)		Etch silicon dioxide.
g)		Remove photoresist.
h)		Implant boron.
i)		Remove silicon dioxide.