

Planarity testing and embedding

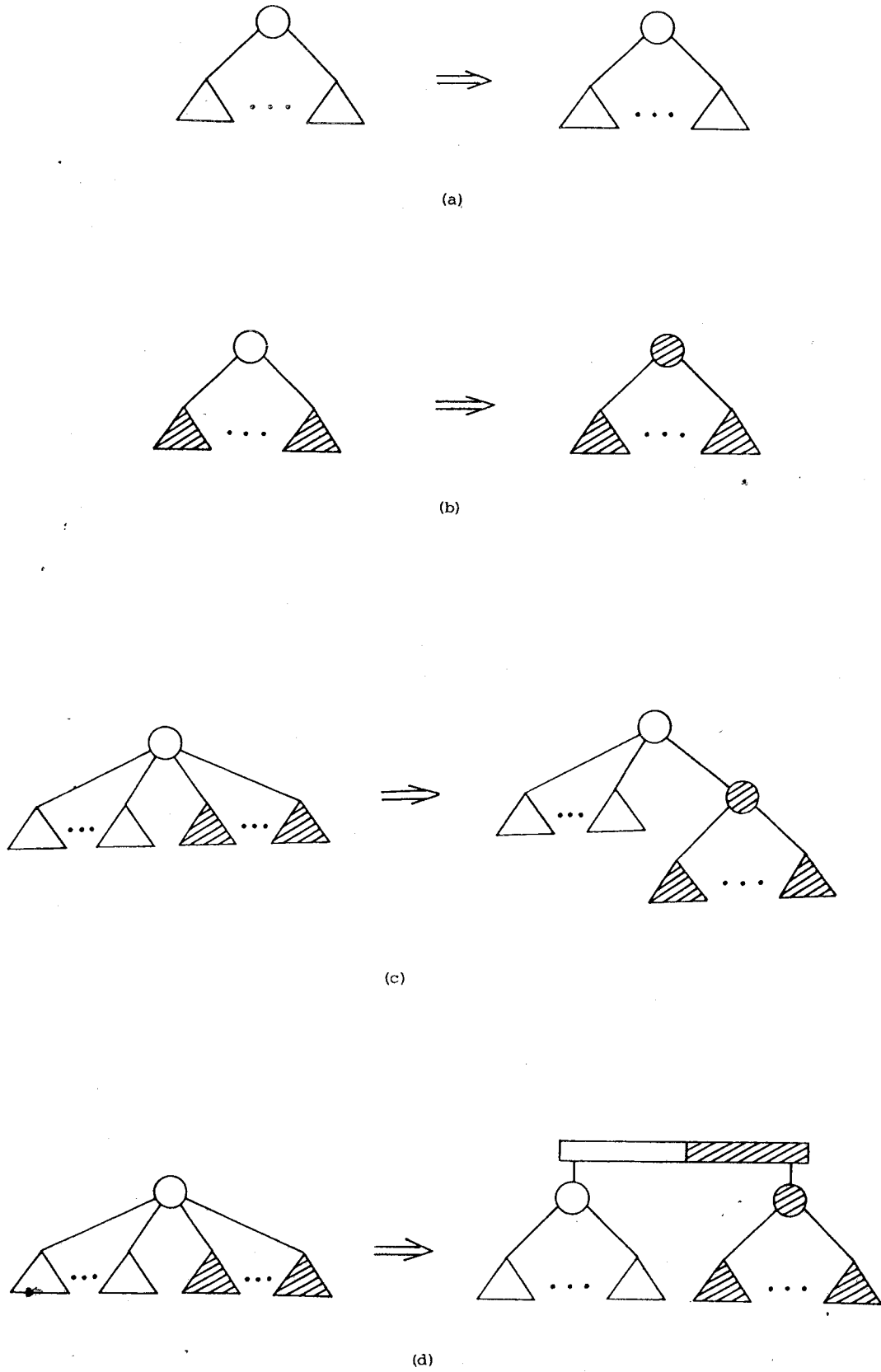
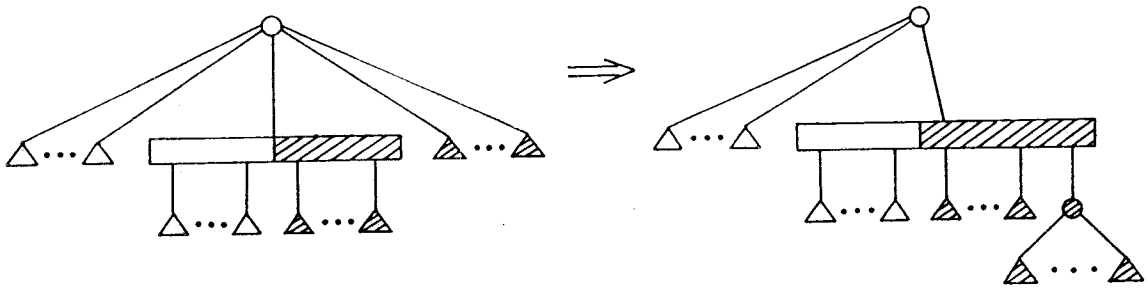
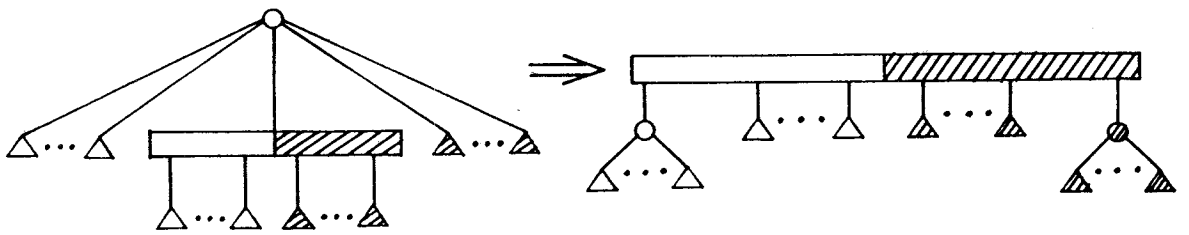


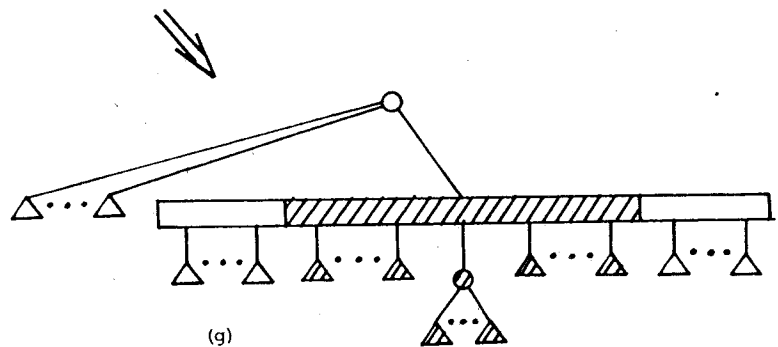
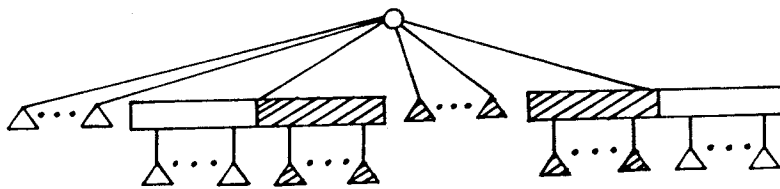
Fig. 3.6. The template matchings.



(e)

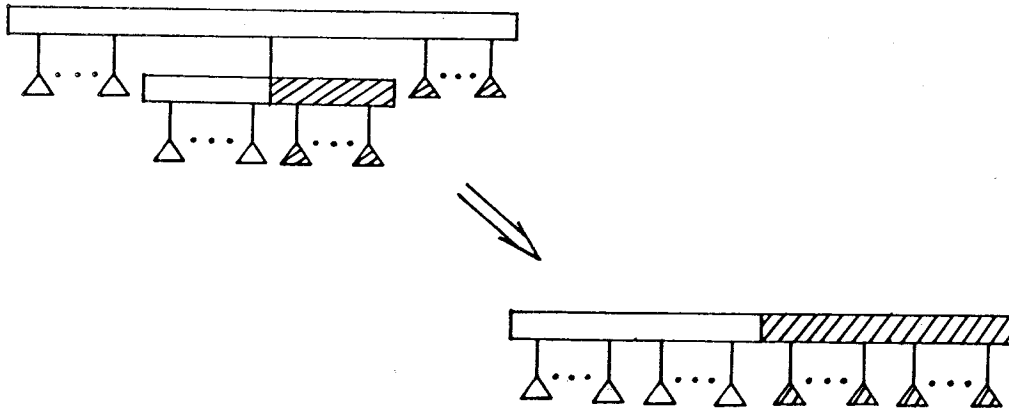


(f)

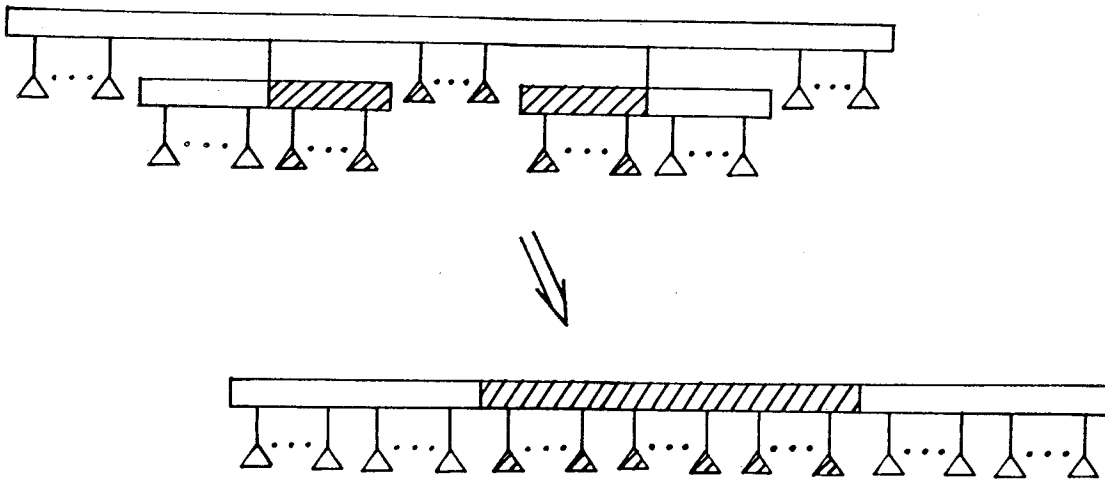


(g)

Fig. 3.6 (continued)

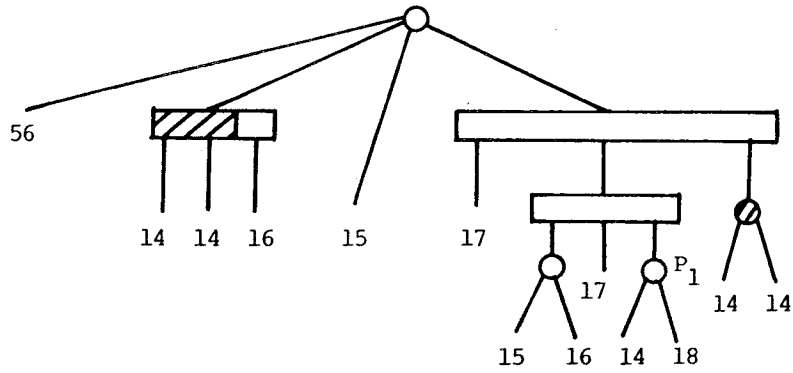


(h)



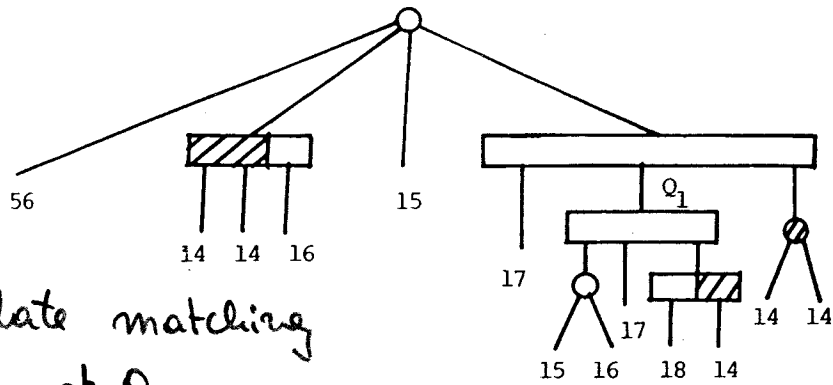
(i)

Fig. 3.6 (continued)



(a)

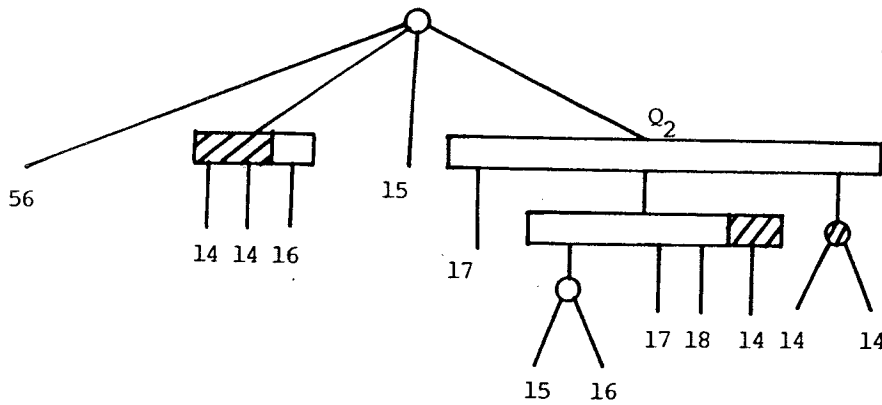
Apply template matching
of type (d) to P_1



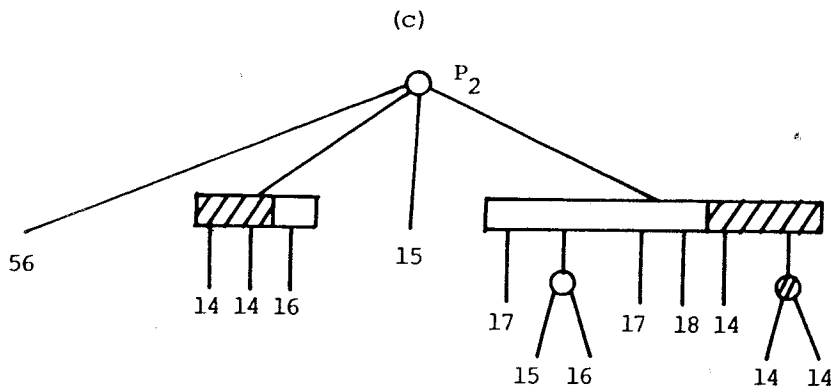
(b)

Apply a template matching
of type (e) at Q_1

Fig. 3.7. An example of a reduction of a PQ-tree.



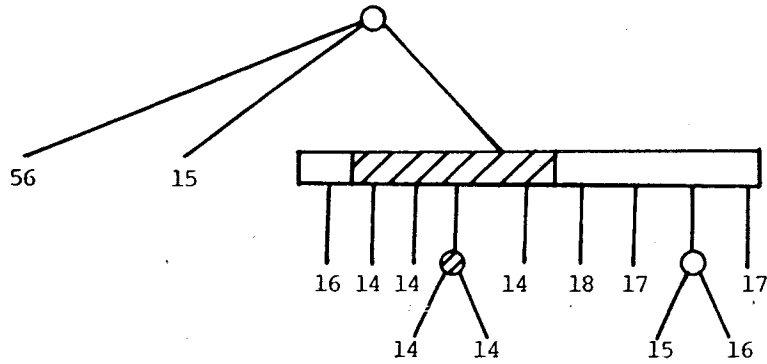
Apply a template matching of type (h) at Q_2



Apply a template matching of type (g) at P_2

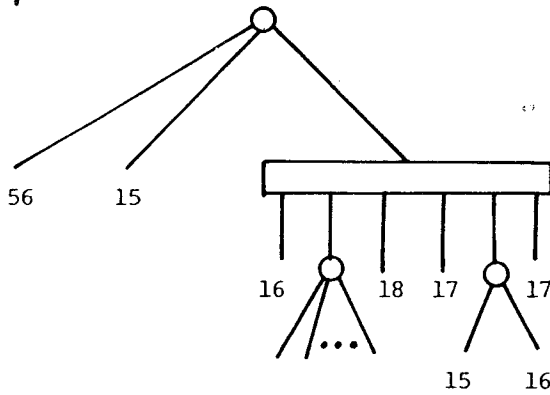
(d)

Fig. 3.7 (continued)



(e)

Construct B_{14}
 by replacing all
 full nodes by a
 single \varnothing node having
 sons which correspond to the neighbors of vertex 14
 having n -numbers
 larger than 14.



(f)

Fig. 3.7 (continued)

Observe that it is impossible to transform
 the last PQ-tree such as to produce a consecutive
 interval of leaves labelled by 15, that is a
 full node of pertinent leaves.

The given graph is not planar!