

```

1  public class LFUniversal {
2      private Node[] head;
3      private Node tail;
4      public LFUniversal() {
5          tail = new Node();
6          tail.seq = 1;
7          for (int i = 0; i < n; i++)
8              head[i] = tail
9      }
10     public Response apply(Invoc invoc) {
11         int i = ThreadID.get();
12         Node prefer = new Node(invoc);
13         while (prefer.seq == 0) {
14             Node before = Node.max(head);
15             Node after = before.decideNext.decide(prefer);
16             before.next = after;
17             after.seq = before.seq + 1;
18             head[i] = after;
19         }
20         SeqObject myObject = new SeqObject();
21         Node current = tail.next;
22         while (current != prefer){
23             myObject.apply(current.invoc);
24             current = current.next;
25         }
26         return myObject.apply(current.invoc);
27     }
28 }

```

**FIGURE 6.4** The lock-free universal construction.