

```
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.