

```

17     private static enum Status {EMPTY, AVAILABLE, BUSY};
18     private static class HeapNode<S> {
19         Status tag;
20         int score;
21         S item;
22         int owner;
23         Lock lock;
24         public void init(S myItem, int myScore) {
25             item = myItem;
26             score = myScore;
27             tag = Status.BUSY;
28             owner = ThreadID.get();
29         }
30         public HeapNode() {
31             tag = Status.EMPTY;
32             lock = new ReentrantLock();
33         }
34         public void lock() {lock.lock();}
35         ... // other methods omitted
36     }

```

**FIGURE 15.9** The FineGrainedHeap class: inner HeapNode class.