

```
1 public boolean add(T item) {
2     int key = item.hashCode();
3     head.lock();
4     Node pred = head;
5     try {
6         Node curr = pred.next;
7         curr.lock();
8         try {
9             while (curr.key < key) {
10                 pred.unlock();
11                 pred = curr;
12                 curr = curr.next;
13                 curr.lock();
14             }
15             if (curr.key == key) {
16                 return false;
17             }
18             Node node = new Node(item);
19             node.next = curr;
20             pred.next = node;
21             return true;
22         } finally {
23             curr.unlock();
24         }
25     } finally {
26         pred.unlock();
27     }
28 }
```

FIGURE 9.6 The FineList class: The add() method uses hand-over-hand locking to traverse the list. The **finally** blocks release locks before returning.