

```

1  void acquire(spinlock *lock) {
2      int attempts = 0;
3      while (true) {
4          ++attempts;
5          TLE_STATUS status = TX_Begin;
6          if (status == STARTED) {
7              if (!lock.held()) {
8                  return;
9              }
10             else {
11                 TX_End;
12                 attempts--;
13                 while (lock.held()) { }
14             }
15         }
16         else if (status != TX_Conflict || attempts >= 4) {
17             lock.acquire();
18             return;
19         }
20     }
21 }
22 void release(spinlock *lock) {
23     if (!lock.held()) {
24         TX_End;
25     }
26     else {
27         lock.release();
28     }
29 }

```

FIGURE 20.7 A complete implementation of TLE, using a spin-lock as the fallback path.