

```

chan request(int clientID, int cyl, types of other arguments);
chan reply[n](types of results);
process Disk_Driver {
    queue left, right; # ordered queues of saved requests
    int clientID, cyl, headpos = 1, nsaved = 0;
    variables to hold other arguments in a request;
    while (true) {      ## loop invariant SST
        while (!empty(request) or nsaved == 0) {
            # wait for first request or receive another one
            receive request(clientID, cyl, ...);
            if (cyl <= headpos)
                insert(left, clientID, cyl, ...);
            else
                insert(right, clientID, cyl, ...);
            nsaved++;
        }
        # select best saved request from left or right
        if (size(left) == 0)
            remove(right, clientID, cyl, args);
        else if (size(right) == 0)
            remove(left, clientID, cyl, args);
        else
            remove request closest to headpos from left or right;
        headpos = cyl; nsaved--;
        access the disk;
        send reply[clientID](results);
    }
}

```

Figure 7.9 Self-scheduling disk driver.