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.