```
module ReadersWriters
  op read(result result types);  # uses RPC
  op write(value types);     # uses rendezvous
body
  op startread(), endread();   # local operations
  storage for the database or file transfer buffers;

  proc read(results) {
    call startread();    # get read permission
    read the database;
    send endread();      # release read permission
  }

  process Writer {
    int nr = 0;
    while (true) {
      in startread() -> nr = nr+1;
      [] endread() -> nr = nr-1;
      [] write(values) and nr == 0 ->
           write the database;
      ni
    }
  }
end ReadersWriters
```

Figure 8.13 Readers and writers with encapsulated database.