```
S0
        ADD BUS MASTER!
        add bus master()
                                    S1
        <sup>1</sup>0T
                       SYS INIT?
                       initialize().
                                   clk <= QUERY HANDLING TIME
                       clean() T1
                                        S2
                                                                   clk == QUERY HANDLING TIME
                                                                              MAX_PRIORITY!
                                       QUERY IN[ID]?
  has completed request()
                                       parse bus message(),
                          T13
  CPU ACK[get ack to()]!
                                       clk = 0
                                       T2<sup>№</sup>
  send completed request data(),
                                                   clk <= DATA HANDLING TIME
  clean()
                           Ready
                                                    T10°
                                       DATA INIID
                                                                  clk == DATA HANDLING TIME
                                    handle data reception(),
                                                                                MAX PRIORITY!
  has completed auto evict()
                                    clk=0
                                                              S4
  FORCE EXTRA URGENT!
  send completed request data(),
                                   can take requests()
  unblock request()
                                   CPU REQ[ID]?
                                   parse request(),
                                   clk = 0
                              S6 V
                                    clk <= REQUEST HANDLING TIME
                                   clk == REQUEST HANDLING TIME
                                   MAX PRIORITY!
!should unstall()
&&!should emit query()
                                   T15<sup>□</sup>
                                              !should send data()
FORCE URGENT!
                                              FORCE EXTRA URGENT!
                                    S5
clean() T9<sup>h</sup>
                                           T6 handle unstalling requests()
                                                                           S3
       should unstall()
                                                               should send data as reply()
                                    should emit query()
       &&!should emit query()
                                                               &&!should send data to mem()
                                       QUERY OUT[ID]!
       FORCE URGENT!
                                                               DATA OUT[ID]!
                                        T7
       keep unstalling requests()
                                                               send data as reply()
                                                               should send data to mem()
                                                               DATA OUT[ID]!
                                                                                   lT5°
                                                               send data to mem()
```