



Figure 48-9—PCS receive state diagram

thus register link\_status flag is set to OK whenever the align\_status flag is set to OK and no errors preventing link operation are present in the PCS or PMA.

**Editor's Note:** to be removed prior to final publication  
Need to define the correct Link\_Status bits from MDIO/MDC

#### 48.2.5.4 Link status reporting

Link status reporting involves detection of link status conditions and the signaling of link fault status. The purpose of link status reporting is to quickly identify and convey link status conditions to the RS which can take the necessary action to activate (deactivate) the link via the setting of the RS Link Status bit. Link status reporting and MAC packet transmission is mutually exclusive.

##### 48.2.5.4.1 Link status detection

10GBASE-X link status conditions include signal and deskew status conditions. Link status conditions include local\_fault and remote\_fault conditions. A local\_fault condition is recognized by the PCS Receive process whenever align\_status=FAIL. Remote\_fault conditions are not detected by the PCS or PMA and are detected only by the RS. A local\_fault condition may also be recognized by any 10GBASE-X process upon detection of an error condition which prevents continued reliable operation, but that is beyond the scope of this standard.

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