from (22) a first channel estimation is obtained. Using it and applying the Bits Recovering block (cf. Fig. 7) soft/hard coded bits are obtained. From these soft/hard coded bits, we generate an estimate \( \hat{a}^{(n)}_{m_0+p,n_0+q} \) of the data \( a_{m_0+p,n_0+q} \) around the pilot position \((m_0, n_0)\). \( n \) indicates the iteration number. These data are then used to compute another estimate of \( a^{(i)}_{m_0,n_0} \) (23) by:

\[
\hat{a}^{(i)}_{m_0,n_0} = \sum_{(p,q) \in \Omega_{\Delta m,\Delta n}} \hat{a}^{(n)}_{m_0+p,n_0+q} \langle g \rangle^{m_0,n_0}_{m_0+p,n_0+q}.
\]

Then, the process should be reiterated and a new channel estimation can be performed using (22) with this new "pseudo-pilot" estimation value. Then, the Bits Recovering block gives new decoded bits and Soft/Hard coded bits. The process can be repeated \( n \) times.

**B. Advantages of the iterative CE method**

There are two main advantages with the iterative CE method.

**First advantage:** The first advantage is that, assuming a perfect estimation, then the power