```
hb[y_][UU[L_], UU[R_]] :=
  CF[UU[Expand[Distribute[pp[L, R]] /. {
        pp[0, _] → 0, pp[_, 0] → 0,
        pp[_β | _δβ, _] → 0,
        pp[_, _β | _δβ] → 0,
        pp[_c | _ao | _ca | _aao, _c | _ao | _ca | _aao] → 0,
        pp[u_c | u_ao | u_ca | u_aao, v_a] :→ -pp[v, u]
       } /. {
       pp[a[f_, i_, y], u_] :→ (u /. {
            a[g_, j_, k_] :→ Kδyk hb[f g, i, j, k],
            c[g_, j_] :→ Kδyj ao[f g, i, y],
            ao[g_, j_, k_] :→ Kδyk ao[-f g bi, j, y],
            ca[g_, j_, k_, l_] :→
             Kδyj (ca[f g bk, l, i, y] + aao[f g, i, l, k, y]) +
              Kδyl (ca[-f g bi, j, k, y] + ca[f g bk, j, i, y]) +
              Kδyjl ao[f g bk, i, y],
            aao[g_, j_, k_, l_, m_] :→
             Kδyk (ca[-f g bj bl, m, i, y] +
                  aao[-f g bi, j, m, l, y]) +
              Kδym (ca[-f g bj bl, k, i, y] +
                  aao[-f g bi, j, k, l, y]) +
              Kδykm ao[-f g bj bl, i, y]
           }),
        _pp → 0
       }]]];
```