```
\langle \{\}, \ \{\}, \ id, \ \{[a]\langle [b]f_n^C\langle X, Y\rangle, Z\rangle \approx_? [b]\langle [a]f_n^C\langle \overline{a}, X\rangle, Z\rangle \}\rangle
                                                                                                                                                       (\approx_? [\mathbf{ab}])
                                                                              \langle \{\}, \ \{\}, \ id, \ \{\langle [b]f_n^C\langle X, Y\rangle, Z\rangle \approx_? \langle [b]f_n^C\langle \overline{b}, (a\,b).X\rangle, (a\,b).Z\rangle, \ a\,\#_?\, \langle [a]f_n^C\langle \overline{a}, X\rangle, Z\rangle \}\rangle
                                                                                                                                                      (\approx_? \mathbf{pair})
                                                                              \langle \{\}, \ \{\}, \ id, \ \{[b]f_n^C\langle X, Y\rangle \approx_? [b]f_n^C\langle \overline{b}, (a\,b).X\rangle, \ Z\approx_? (a\,b).Z, \ a\,\#_?\,\langle [a]f_n^C\langle \overline{a}, X\rangle, Z\rangle \}\rangle
                                                                                                                                                       (\approx_? [aa])
                                                                                   \langle \{\}, \ \{\}, \ id, \ \{f_n^C \langle X, Y \rangle \approx_? f_n^C \langle \overline{b}, (a \, b).X \rangle, \ Z \approx_? (a \, b).Z, \ a \, \#_? \, \langle [a] f_n^C \langle \overline{a}, X \rangle, Z \rangle \} \rangle
                                                                                                              (\approx_? \mathbf{C})
\langle \{\}, \{\}, id, \{X \approx_? \overline{b}, Y \approx_? (ab).X, Z \approx_? (ab).Z, a \#_? \langle [a]f_n^C \langle \overline{a}, X \rangle, Z \rangle \} \rangle
                                                                                                                                                                                    \{\{\}, \{\}, id, \{X \approx_? (ab).X, Y \approx_? \overline{b}, Z \approx_? (ab).Z, a \#_? \langle [a]f_n^C \langle \overline{a}, X \rangle, Z \rangle\}\}
                                                           (\approx_? \mathbf{inst})
                                                                                                                                                                                                                                                   (\approx_? inv)
              \langle \{\}, \{\}, X/\overline{b}, \{Y \approx_? \overline{a}, Z \approx_? (ab).Z, a \#_? \langle [a] f_n^C \langle \overline{a}, \overline{b} \rangle, Z \rangle \} \rangle
                                                                                                                                                                                    \{\{\}, \{\}, id, \{Y \approx_? \overline{b}, Z \approx_? (ab).Z, a \#_? \langle [a]f_n^C \langle \overline{a}, X \rangle, Z \rangle, (ab).X \approx_? X\}\}
                                                          (\approx_? \mathbf{inst})
                                                                                                                                                                                                                                                 (\approx_? \mathbf{inst})
                \langle \{\}, \{\}, \{X/\overline{b}, Y/\overline{a}\}, \{Z \approx_? (a b).Z, a \#_? \langle [a]f_n^C \langle \overline{a}, \overline{b} \rangle, Z \rangle \} \rangle
                                                                                                                                                                                             \langle \{\}, \{\}, Y/\overline{b}, \{Z \approx_? (ab).Z, a \#_? \langle [a]f_n^C \langle \overline{a}, X \rangle, Z \rangle, (ab).X \approx_? X \} \rangle
                                                                                                                                                                                                                                                   (\approx_7 inv)
                                                             (\approx_? inv)
                                                                                                                                                                                            \langle \{\},\ \{\},\ Y/\overline{b},\ \{a\,\#_?\,\langle [a]f_n^C\langle \overline{a},X\rangle,Z\rangle,\ (a\,b).X\approx_? X,\ (a\,b).Z\approx_? Z\}\rangle
               \langle \{\}, \{\}, \{X/\overline{b}, Y/\overline{a}\}, \{a \#_? \langle [a] f_n^C \langle \overline{a}, \overline{b} \rangle, Z \rangle, (a b).Z \approx_? Z \} \rangle
                                                          (\#_? \mathbf{pair})
                                                                                                                                                                                                                                                (#? pair)
           \{\{\}, \{\}, \{X/\overline{b}, Y/\overline{a}\}, \{a \#_? [a] f_n^C \langle \overline{a}, \overline{b} \rangle, a \#_? Z, (a b).Z \approx_? Z\} \}
                                                                                                                                                                                        \{\{\}, \{\}, Y/\overline{b}, \{a \#_? [a] f_n^C \langle \overline{a}, X \rangle, a \#_? Z, (a b).X \approx_? X, (a b).Z \approx_? Z\} \}
                                                            (\#_? \mathbf{a}[\mathbf{a}])
                                                                                                                                                                                                                                                  (\#_? \mathbf{a}[\mathbf{a}])
                               \{\{\}, \{\}, \{X/\overline{b}, Y/\overline{a}\}, \{a \#_? Z, (a b).Z \approx_? Z\}\}
                                                                                                                                                                                                             \{\}, \{\}, Y/\overline{b}, \{a \#_? Z, (a b).X \approx_? X, (a b).Z \approx_? Z\}\}
                                                             (#? var)
                                                                                                                                                                                                                                                   (#? var)
                                   \langle \{a\#Z\}, \{\}, \{X/\bar{b}, Y/\bar{a}\}, \{(a\,b).Z \approx_? Z\} \rangle
                                                                                                                                                                                                                 \langle \{a\#Z\}, \{\}, Y/\overline{b}, \{(ab).X \approx_? X, (ab).Z \approx_? Z\} \rangle
                                                                                (\top)
                                                                                                                                                                                                                                                                      (\top)
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