Summation:

$$[\![\sum_i \pi_i.R_i]\!] \stackrel{\text{def}}{=} \text{new}(l).(l!\langle true\rangle \mid \prod_i [\![\pi_i.R_i]\!]_l)$$

Sending:

$$[\![c!\langle\overline{V}\rangle.P]\!]_r \stackrel{\text{def}}{=} \text{new}(ack).(c!\langle r, ack, \overline{V}\rangle \mid ack?(x).\text{if } x = true \text{ then } [\![P]\!] \text{ else (if } x = retry \text{ then } c!\langle r, ack, \overline{V}\rangle \text{ else } stop))$$

Receiving:

$$[\![c?(\overline{X}).P]\!]_l \stackrel{\text{def}}{=} \text{rec } q.c?(r, ack, \overline{X}).(l, r)?d\text{-}lock.[\![P]\!]$$

$(\mathbf{l}, \mathbf{r})?\mathbf{d\text{-}lock}.\mathbf{P}$ **means**:

$$\begin{array}{l} l?(x).(\text{if } x = true \\ \quad \text{then } r?(y).(\text{if } y = true \\ \quad\quad \text{then } l!\langle false\rangle \mid r!\langle false\rangle \mid ack!\langle true\rangle \mid P \\ \quad\quad \text{else } l!\langle true\rangle \mid r!\langle false\rangle \mid ack!\langle false\rangle \mid q) \\ \quad \text{else } l!\langle false\rangle \mid ack!\langle retry\rangle) \end{array}$$