$\begin{array}{ll} PEGREG: (PEG \times REG) \rightarrow REG \\ PEGREG(c,r) = c \cdot r & (1) \\ PEGREG(P1 \cdot P2,r) = PEGREG(P1, PEGREG(P2,r)) & (2) \\ PEGREG(P1/P2,r) = PEGREG(P1,r) \cup (PEGREG(P2,r) \cap \neg PEGREG(P1,*)) & (3) \\ PEGREG(P1*,r) = PEGREG(P1,\varepsilon) * \cdot (r \cap \neg PEGREG(P1,*)) & (4) \end{array}$