weak-antecedent-conditional[11,40]

$\forall es$:ES, P_1, Q_1, P_2, Q_2:(E$\rightarrow \mathbb{P}$), dcd_P_1:(e:E$\rightarrow$Dec($P_1(e)$)), f:($\{e$:E$|\ P_1(e)\} \rightarrow \{e$:E$|\ Q_1(e)\}$),
g:($\{e$:E$|\ P_2(e)\} \rightarrow \{e$:E$|\ Q_2(e)\}$).
$(Q_1 \leftarrow{=}{=} f {=}{=} P_1\ \&\ Q_2 \leftarrow{=}{=} g {=}{=} P_2)$
$\Rightarrow \lambda e.(Q_1(e)) \vee (Q_2(e)) \leftarrow{=}{=}[P_1?\ f : g]{=}{=} \lambda e.(P_1(e)) \vee (P_2(e))$

---

http://www.nuprl.org/FDLcontent/p0_963683_/p113_216179_{weak-antecedent-conditional}.html