

Q-R-glues-split^{11,40}

$\forall es:ES, P:(E \rightarrow \mathbb{P}), p:(\forall e:E. \text{Dec}(P(e))), Q, R:(E \rightarrow E \rightarrow \mathbb{P}).$
 $(\forall x, y:E. (Q(x,y) \Rightarrow (P(x) \iff P(y))))$
 $\Rightarrow (\forall A, B:\text{Type}, Ia:\text{AbsInterface}(A), Ib:\text{AbsInterface}(B), f:(E(Ia) \rightarrow B), g_1, g_2:(E(Ib) \rightarrow E),$
 $q:(\forall e:E. \text{Dec}((\uparrow(e \in_b Ib)) \text{ c} \wedge P(g_1(e))))).$
 $g_1 \text{ glues } (Ia|p):Q \dashv\vdash f \rightarrow (Ib|q):R$
 $\Rightarrow g_2 \text{ glues } (Ia|\neg p):Q \dashv\vdash f \rightarrow (Ib|\neg q):R$
 $\Rightarrow [\lambda e.P(g_1(e)) \text{? } g_1 : g_2] \text{ glues } Ia:Q \dashv\vdash f \rightarrow Ib:R)$