∗54·43. $\vdash :. \alpha, \beta \,\epsilon\, 1 \,.\, \supset : \alpha \cap \beta = \Lambda \,.\, \equiv \,.\, \alpha \cup \beta \,\epsilon\, 2$

Dem.

$\vdash . \ast 54\cdot 26 \,.\, \supset \vdash :. \, \alpha = \iota`x \,.\, \beta = \iota`y \,.\, \supset : \alpha \cup \beta \,\epsilon\, 2 \,.\, \equiv \,.\, x \neq y$

$[\ast 51\cdot 231] \hspace{5.5cm} \equiv \,.\, \iota`x \cap \iota`y = \Lambda \,.$

$[\ast 13\cdot 12] \hspace{5.5cm} \equiv \,.\, \alpha \cap \beta = \Lambda \hspace{1.5cm} (1)$

$\vdash . (1) \,.\, \ast 11\cdot 11\cdot 35 \,.\, \supset$

$\hspace{1.5cm} \vdash :. \, (\exists x, y) \,.\, \alpha = \iota`x \,.\, \beta = \iota`y \,.\, \supset : \alpha \cup \beta \,\epsilon\, 2 \,.\, \equiv \,.\, \alpha \cap \beta = \Lambda \hspace{1cm} (2)$

$\vdash . (2) \,.\, \ast 11\cdot 54 \,.\, \ast 52\cdot 1 \,.\, \supset \vdash .\, \text{Prop}$