

t11_waybel_0 (TMMyeK- mEe6JdwiY8ChWTXYVhmeyc2Qn7DBy)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $l1_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v10_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r1_orders_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_waybel_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_waybel_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0 : \iota \Rightarrow o. \forall X1. \forall X2. (((\neg v2_struct_0 X2) \wedge \\
 & (l1_orders_2 X2)) \wedge ((\neg v2_struct_0 X1) \wedge (l1_waybel_0 X1 X2))) \Rightarrow \\
 & ((r1_waybel_0 X2 X1 (ReplSep (toset (\lambda X3 : \iota. m1_subset_1 X3 \\
 & (u1_struct_0 X1)))) (\lambda X3 : \iota. X0 (k2_waybel_0 X2 X1 X3)) (\lambda X3 : \\
 & \iota. k2_waybel_0 X2 X1 X3))) \Leftrightarrow (\exists X3. (m1_subset_1 X3 (u1_struct_0 \\
 & X1)) \wedge (\forall X4. (m1_subset_1 X4 (u1_struct_0 X1)) \Rightarrow ((r1_orders_2 \\
 & X1 X3 X4) \Rightarrow (X0 (k2_waybel_0 X2 X1 X4))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. \\
 & ((\neg v2_struct_0 X1) \wedge (l1_waybel_0 X1 X0)) \Rightarrow ((v10_waybel_0 X1 X0) \Leftrightarrow \\
 & (\forall X2. (m1_subset_1 X2 (u1_struct_0 X1)) \Rightarrow (r1_waybel_0 X0 \\
 & X1 (ReplSep (toset (\lambda X3 : \iota. m1_subset_1 X3 (u1_struct_0 X1)))) \\
 & (\lambda X3 : \iota. r1_orders_2 X0 (k2_waybel_0 X0 X1 X2) (k2_waybel_0 \\
 & X0 X1 X3)) (\lambda X3 : \iota. k2_waybel_0 X0 X1 X3))))))
 \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. \\
 & ((\neg v2_struct_0 X1) \wedge (l1_waybel_0 X1 X0)) \Rightarrow ((v10_waybel_0 X1 X0) \Leftrightarrow \\
 & (\forall X2. (m1_subset_1 X2 (u1_struct_0 X1)) \Rightarrow (\exists X3. (m1_subset_1 \\
 & X3 (u1_struct_0 X1)) \wedge (\forall X4. (m1_subset_1 X4 (u1_struct_0 \\
 & X1)) \Rightarrow ((r1_orders_2 X1 X3 X4) \Rightarrow (r1_orders_2 X0 (k2_waybel_0 X0 X1 \\
 & X2) (k2_waybel_0 X0 X1 X4)))))))))
 \end{aligned}$$