

t4_openlatt

(TMV3ch4TNb2bLW2WuthLkJXjqtDPdjt49wt)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k6_openlatt : \iota \Rightarrow \iota$ be given. Let $k1_openlatt : \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $g3_lattices : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v10_lattices : \iota \Rightarrow o$ be given. Let $l3_lattices : \iota \Rightarrow o$ be given. Let $k5_openlatt : \iota \Rightarrow \iota$ be given. Let $k4_openlatt : \iota \Rightarrow \iota$ be given. Let $v3_lattices : \iota \Rightarrow o$ be given. Let $u2_lattices : \iota \Rightarrow \iota$ be given. Let $u1_lattices : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((v1_funct_1 X1) \wedge ((v1_funct_2 \\ & X1 (k2_zfmisc_1 X0 X0) X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (k2_zfmisc_1 X0 X0) X0)))))) \wedge ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 \\ & (k2_zfmisc_1 X0 X0) X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (k2_zfmisc_1 X0 X0) X0)))))) \Rightarrow (\forall X3. \forall X4. \forall X5. \\ & (g3_lattices X0 X1 X2 = g3_lattices X3 X4 X5) \Rightarrow ((X0 = X3) \wedge ((X1 = X4) \wedge \\ & (X2 = X5)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow ((\neg v2_struct_0 (k6_openlatt X0)) \wedge ((v10_lattices (k6_openlatt \\ & X0)) \wedge (l3_lattices (k6_openlatt X0)))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow ((v1_funct_1 (k5_openlatt X0)) \wedge ((v1_funct_2 (k5_openlatt \\ & X0) (k2_zfmisc_1 (k1_openlatt X0) (k1_openlatt X0)) (k1_openlatt \\ & X0)) \wedge (m1_subset_1 (k5_openlatt X0) (k1_zfmisc_1 (k2_zfmisc_1 \\ & (k2_zfmisc_1 (k1_openlatt X0) (k1_openlatt X0)) (k1_openlatt \\ & X0)))))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ X0))) \Rightarrow ((v1_funct_1 (k4_openlatt X0) \wedge (v1_funct_2 (k4_openlatt \\ X0) (k2_zfmisc_1 (k1_openlatt X0) (k1_openlatt X0)) (k1_openlatt \\ X0)) \wedge (m1_subset_1 (k4_openlatt X0) (k1_zfmisc_1 (k2_zfmisc_1 \\ (k2_zfmisc_1 (k1_openlatt X0) (k1_openlatt X0)) (k1_openlatt \\ X0)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. (((v1_funct_1 X1) \wedge ((v1_funct_2 \\ X1 (k2_zfmisc_1 X0 X0) X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ (k2_zfmisc_1 X0 X0) X0)))) \wedge ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 \\ (k2_zfmisc_1 X0 X0) X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ (k2_zfmisc_1 X0 X0) X0)))))) \Rightarrow ((v3_lattices (g3_lattices X0 X1 \\ X2)) \wedge (l3_lattices (g3_lattices X0 X1 X2))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ X0))) \Rightarrow (k6_openlatt X0 = g3_lattices (k1_openlatt X0) (k4_openlatt \\ X0) (k5_openlatt X0)) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0. (l3_lattices X0) \Rightarrow ((v3_lattices X0) \Rightarrow (X0 = g3_lattices \\ (u1_struct_0 X0) (u2_lattices X0) (u1_lattices X0))) \end{aligned} \quad (7)$$

Theorem 1

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ X0))) \Rightarrow (u1_struct_0 (k6_openlatt X0) = k1_openlatt X0) \end{aligned}$$