

t10_openlatt
(TMJK96Y3aQNR7tTA9civHi85XMVRQWrzn2t)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v10_lattices : \iota \Rightarrow o$ be given. Let $v11_lattices : \iota \Rightarrow o$ be given. Let $l3_lattices : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v19_lattices : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v20_lattices : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k7_openlatt : \iota \Rightarrow \iota$ be given. Let $v2_filter_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v10_lattices X0) \wedge ((v11_lattices \\ & X0) \wedge (l3_lattices X0)))) \Rightarrow (k7_openlatt X0 = ReplSep (toset (\lambda X1 : \\ & \iota. (\neg v1_xboole_0 X1) \wedge ((v19_lattices X1 X0) \wedge ((v20_lattices \\ & X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))))))) (\lambda X1 : \\ & \iota. (X1 \neq u1_struct_0 X0) \wedge (v2_filter_0 X1 X0)) (\lambda X1 : \iota. X1)) \end{aligned} \tag{1}$$

Theorem 1

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v10_lattices X0) \wedge ((v11_lattices \\ & X0) \wedge (l3_lattices X0)))) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge ((v19_lattices \\ & X1 X0) \wedge ((v20_lattices X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & X0)))))) \Rightarrow ((X1 \in k7_openlatt X0) \Leftrightarrow ((X1 \neq u1_struct_0 X0) \wedge (v2_filter_0 \\ & X1 X0)))) \end{aligned}$$