

t14_bciideal (TMMS2KRwNAbX7M1cTzcKCYC8y9HHcNM2ADF)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v3_bciideal_1 : \iota \Rightarrow o$ be given. Let $v4_bciideal_1 : \iota \Rightarrow o$ be given. Let $v5_bciideal_1 : \iota \Rightarrow o$ be given. Let $v7_bciideal_1 : \iota \Rightarrow o$ be given. Let $l2_bciideal_1 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ 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 $m1_bciideal : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_bciideal_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_bciideal_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v3_bciideal_1 X0) \wedge ((v4_bciideal_1 \\ & X0) \wedge ((v5_bciideal_1 X0) \wedge ((v7_bciideal_1 X0) \wedge (l2_bciideal_1 X0)))))) \Rightarrow \\ & (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (k1_bciideal_1 X0 \\ & X1 (k4_struct_0 X0) = X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v3_bciideal_1 X0) \wedge ((v4_bciideal_1 \\ & X0) \wedge ((v5_bciideal_1 X0) \wedge ((v7_bciideal_1 X0) \wedge (l2_bciideal_1 X0)))))) \Rightarrow \\ & (\forall X1. ((\neg v1_xboole_0 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (u1_struct_0 X0)))) \Rightarrow ((m1_bciideal X1 X0) \Leftrightarrow ((k4_struct_0 X0 \in X1) \wedge \\ & (\forall X2. (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. (m1_subset_1 \\ & X3 (u1_struct_0 X0)) \Rightarrow (\forall X4. (m1_subset_1 X4 (u1_struct_0 \\ & X0)) \Rightarrow (((k1_bciideal_1 X0 (k1_bciideal_1 X0 X2 X3) X4 \in X1) \wedge (k1_bciideal_1 \\ & X0 X3 X4 \in X1)) \Rightarrow (X2 \in X1)))))))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge ((v4_bcialg_1 \\
& X0) \wedge ((v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge (l2_bcialg_1 X0)))))) \Rightarrow \\
& (\forall X1.((\neg v1_xboole_0 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
& (u1_struct_0 X0)))) \Rightarrow ((m2_bcialg_1 X1 X0) \Leftrightarrow ((k4_struct_0 X0 \in X1) \wedge \\
& (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 \\
& X3 (u1_struct_0 X0)) \Rightarrow (((k1_bcialg_1 X0 X2 X3 \in X1) \wedge (X3 \in X1)) \Rightarrow (X2 \in \\
& X1)))))))
\end{aligned} \tag{4}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge ((v4_bcialg_1 \\
& X0) \wedge ((v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge (l2_bcialg_1 X0)))))) \Rightarrow \\
& (\forall X1.((\neg v1_xboole_0 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
& (u1_struct_0 X0)))) \Rightarrow ((m1_bciideal X1 X0) \Rightarrow (m2_bcialg_1 X1 X0)))
\end{aligned}$$