t73_bvfunc14 (TMaZTQY7EcogzjarP523hhaRrxQGcn7tUmZ)

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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 $k1\_bvfunc\_2 : \iota \Rightarrow \iota$ be given. Let $m1\_eqrel\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_bvfunc\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_partit1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5.\forall X6.\forall X7.\forall X8.k7\_enumset1\ X0\ X1\ X2\ X3\ X4\ X5\ X6\ X7\ X8 = k2\_xboole\_0\ (k3\_enumset1\ X0\ X1\ X2\ X3\ X4)\ (k2\_enumset1\ X5\ X6\ X7\ X8) \tag{1}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_bvfunc\_2\ X0))) \Rightarrow (\forall X2.(m1\_eqrel\_1\ X2\ X0) \Rightarrow (\forall X3.(m1\_eqrel\_1\ X3\ X0) \Rightarrow (\forall X4.(m1\_eqrel\_1\ X4\ X0) \Rightarrow (\forall X5.(m1\_eqrel\_1\ X5\ X0) \Rightarrow (\forall X6.(m1\_eqrel\_1\ X6\ X0) \Rightarrow (\forall X7.(m1\_eqrel\_1\ X7\ X0) \Rightarrow (\forall X8.(m1\_eqrel\_1\ X8\ X0) \Rightarrow (\forall X9.(m1\_eqrel\_1\ X9\ X0) \Rightarrow (\forall X10.(m1\_eqrel\_1\ X10\ X0) \Rightarrow ((X1 = k7\_enumset1\ X2\ X3\ X4\ X5\ X6\ X7\ X8\ X9\ X10) \Rightarrow ((X2 = X3) \vee ((X2 = X4) \vee ((X2 = X5) \vee ((X2 = X6) \vee ((X2 = X7) \vee ((X2 = X8) \vee ((X2 = X9) \vee ((X2 = X10) \vee ((X3 = X4) \vee ((X3 = X5) \vee ((X3 = X6) \vee ((X3 = X7) \vee ((X3 = X8) \vee ((X3 = X9) \vee ((X3 = X10) \vee ((X4 = X5) \vee ((X4 = X6) \vee ((X4 = X7) \vee ((X4 = X8) \vee ((X4 = X9) \vee ((X4 = X10) \vee ((X5 = X6) \vee ((X5 = X7) \vee ((X5 = X8) \vee ((X5 = X9) \vee ((X5 = X10) \vee ((X6 = X7) \vee ((X6 = X8) \vee ((X6 = X9) \vee ((X6 = X10) \vee ((X7 = X8) \vee ((X7 = X9) \vee ((X7 = X10) \vee ((X8 = X9) \vee ((X8 = X10) \vee ((X9 = X10) \vee (k5\_bvfunc\_2\ X0\ X7\ X1 = k2\_partit1\ X0\ (k2\_partit1\ X0\ (k2\_partit1\ X0\ (k2\_partit1\ X0\ (k2\_partit1\ X0\ (k2\_partit1\ X0\ (k2\_partit1\ X0\ X2\ X3)\ X4)\ X5)\ X6)\ X8)\ X9)\ X10)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.k2\_enumset1\ X0\ X1\ X2\ X3 = k2\_xboole\_0\ (k2\_tarski\ X0\ X1)\ (k2\_tarski\ X2\ X3) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.k2\_tarski\ X0\ X1 = k2\_tarski\ X1\ X0 \tag{4}$$

Theorem 1

$$\begin{gathered}
\forall X0.(\neg v1_xboole_0\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1 \\
(k1_bvfunc_2\ X0))) \Rightarrow (\forall X2.(m1_eqrel_1\ X2\ X0) \Rightarrow (\forall X3. \\
(m1_eqrel_1\ X3\ X0) \Rightarrow (\forall X4.(m1_eqrel_1\ X4\ X0) \Rightarrow (\forall X5. \\
(m1_eqrel_1\ X5\ X0) \Rightarrow (\forall X6.(m1_eqrel_1\ X6\ X0) \Rightarrow (\forall X7. \\
(m1_eqrel_1\ X7\ X0) \Rightarrow (\forall X8.(m1_eqrel_1\ X8\ X0) \Rightarrow (\forall X9. \\
(m1_eqrel_1\ X9\ X0) \Rightarrow (\forall X10.(m1_eqrel_1\ X10\ X0) \Rightarrow ((X1 = k7_enumset1 \\
X2\ X3\ X4\ X5\ X6\ X7\ X8\ X9\ X10) \Rightarrow ((X2 = X3) \vee ((X2 = X4) \vee ((X2 = X5) \vee ((X2 = X6) \vee \\
((X2 = X7) \vee ((X2 = X8) \vee ((X2 = X9) \vee ((X2 = X10) \vee ((X3 = X4) \vee ((X3 = X5) \vee \\
((X3 = X6) \vee ((X3 = X7) \vee ((X3 = X8) \vee ((X3 = X9) \vee ((X3 = X10) \vee ((X4 = X5) \vee \\
((X4 = X6) \vee ((X4 = X7) \vee ((X4 = X8) \vee ((X4 = X9) \vee ((X4 = X10) \vee ((X5 = X6) \vee \\
((X5 = X7) \vee ((X5 = X8) \vee ((X5 = X9) \vee ((X5 = X10) \vee ((X6 = X7) \vee ((X6 = X8) \vee \\
((X6 = X9) \vee ((X6 = X10) \vee ((X7 = X8) \vee ((X7 = X9) \vee ((X7 = X10) \vee ((X8 = X9) \vee \\
((X8 = X10) \vee ((X9 = X10) \vee (k5_bvfunc_2\ X0\ X8\ X1 = k2_partit1\ X0\ (k2_partit1 \\
X0\ (k2_partit1\ X0\ (k2_partit1\ X0\ (k2_partit1\ X0\ (k2_partit1\ X0\ (\\
k2_partit1\ X0\ X2\ X3)\ X4)\ X5)\ X6)\ X7)\ X9)\ X10))
\end{gathered}$$