t51_armstrng (TMZ62fJVAyvG4XkkoMfuP9vPXu3fWuvj8yq)

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Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v1\_finset\_1 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $v11\_armstrng : \iota \Rightarrow o$ be given. Let $l1\_armstrng : \iota \Rightarrow o$ be given. Let $u1\_armstrng : \iota \Rightarrow \iota$ be given. Let $k13\_armstrng : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_armstrng : \iota \Rightarrow \iota$ be given. Let $v6\_armstrng : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_setfam\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u2\_armstrng : \iota \Rightarrow \iota$ be given. Let $k4\_numbers : \iota$ be given. Assume the following.

$$\forall X0.(v1\_finset\_1\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))) \Rightarrow (\neg(\neg v1\_xboole\_0\ X1) \wedge ((v11\_armstrng\ X1) \wedge (\forall X2.((v6\_armstrng\ X2\ X0) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k9\_setfam\_1\ X0)\ (k9\_setfam\_1\ X0))))) \Rightarrow (X1 \neq k13\_armstrng\ X0\ X2))))) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0) \wedge (v1\_finset\_1\ X0)) \Rightarrow (\forall X1.((v6\_armstrng\ X1\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k9\_setfam\_1\ X0)\ (k9\_setfam\_1\ X0))))) \Rightarrow (\exists X2.(l1\_armstrng\ X2) \wedge ((u1\_armstrng\ X2 = X0) \wedge ((\forall X3.(m1\_subset\_1\ X3\ X0) \Rightarrow (k1\_funct\_1\ (u2\_armstrng\ X2)\ X3 = k4\_numbers)) \wedge (X1 = k5\_armstrng\ X2))))) \tag{2}$$

Theorem 1

$$\forall X0.((\neg v1\_xboole\_0\ X0) \wedge (v1\_finset\_1\ X0)) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))) \Rightarrow (\neg(\neg v1\_xboole\_0\ X1) \wedge ((v11\_armstrng\ X1) \wedge (\forall X2.(l1\_armstrng\ X2) \Rightarrow (\neg(u1\_armstrng\ X2 = X0) \wedge (X1 = k13\_armstrng\ (u1\_armstrng\ X2)\ (k5\_armstrng\ X2))))))))$$