

# t22\_afproj (TMMLerqDPWP- cAssd2SCmaw2jL5BXFuCupsv)

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Let  $v7\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v1\_diraf : \iota \Rightarrow o$  be given. Let  $l1\_analoaf : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_incsp\_1 : \iota \Rightarrow \iota$  be given. Let  $k14\_afproj : \iota \Rightarrow \iota$  be given. Let  $k13\_afproj : \iota \Rightarrow \iota$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k5\_afproj : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_aff\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7\_struct\_0 X0) \wedge ((v1\_diraf X0) \wedge (l1\_analoaf X0))) \Rightarrow \\ & (\forall X1.(m1\_subset\_1 X1 (u1\_incsp\_1 (k14\_afproj X0))) \Leftrightarrow (\exists X2. \\ & (m1\_subset\_1 X2 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \wedge ((X1 = k5\_afproj \\ & X0 X2) \wedge (v1\_aff\_1 X2 X0)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7\_struct\_0 X0) \wedge ((v1\_diraf X0) \wedge (l1\_analoaf X0))) \Rightarrow \\ & (\forall X1.(m1\_subset\_1 X1 (u1\_incsp\_1 (k13\_afproj X0))) \Leftrightarrow (\neg \\ & (\neg m1\_subset\_1 X1 (u1\_struct\_0 X0)) \wedge (\forall X2.(m1\_subset\_1 \\ & X2 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (\neg (X1 = k5\_afproj X0 X2) \wedge (v1\_aff\_1 \\ & X2 X0)))))) \end{aligned} \tag{2}$$

## Theorem 1

$$\begin{aligned} & \forall X0.((\neg v7\_struct\_0 X0) \wedge ((v1\_diraf X0) \wedge (l1\_analoaf X0))) \Rightarrow \\ & (\forall X1.(m1\_subset\_1 X1 (u1\_incsp\_1 (k14\_afproj X0))) \Rightarrow (m1\_subset\_1 \\ & X1 (u1\_incsp\_1 (k13\_afproj X0)))) \end{aligned}$$