Hotez
$$\Psi_1 = (p_1 \cdot 1 \cdot p_2)$$

$$\Psi_2 = (g_3 \cdot 1 \cdot g_4)$$

J.
$$T Y_{1} \rightarrow Y_{2}$$
, $T (Y_{1} \vee Y_{2})_{7}Y_{1} \vdash 7Y_{1}$ (ip)

2. $T Y_{1} \rightarrow Y_{2}$, $T (Y_{1} \vee Y_{2})_{7}Y_{1} \vdash 7Y_{1} \rightarrow Y_{2}$ (ip)

3. $T Y_{1} \rightarrow Y_{2}$, $T (Y_{1} \vee Y_{2})_{7}Y_{1} \vdash Y_{2}$ ($\rightarrow e_{1}e_{1}1$)

4. $T Y_{1} \rightarrow Y_{2}$, $T (Y_{1} \vee Y_{2})_{7}Y_{1} \vdash Y_{1} \vee Y_{2}$ ($\forall i_{1}i_{3}$)

5. $T Y_{1} \rightarrow Y_{2}$, $T (Y_{1} \vee Y_{2})_{7}Y_{1} \vdash T (Y_{1} \vee Y_{2})$ (ip)

6. $T Y_{1} \rightarrow Y_{2}$, $T (Y_{1} \vee Y_{2})_{7}Y_{1} \vdash T (7e_{1}h_{1}5)$

7. $T Y_{1} \rightarrow Y_{2}$, $T (Y_{1} \vee Y_{2})_{7} \vdash Y_{1}$ ($7i_{1}6$)

8. $T Y_{1} \rightarrow Y_{2}$, $T (Y_{1} \vee Y_{2})_{7} \vdash Y_{1}$ ($77e_{1}$)

9. $T Y_{1} \rightarrow Y_{2}$, $T (Y_{1} \vee Y_{2})_{7} \vdash Y_{1}$ ($77e_{1}$)

10. $T Y_{1} \rightarrow Y_{2}$, $T (Y_{1} \vee Y_{2})_{7} \vdash T (Y_{1} \vee Y_{2})_{7}$ (ip)

11. $T Y_{1} \rightarrow Y_{2}$, $T (Y_{1} \vee Y_{2})_{7} \vdash T (Y_{1} \vee Y_{2})_{7}$ (ip)

12. $T Y_{1} \rightarrow Y_{2}_{7} \vdash T (Y_{1} \vee Y_{2})_{7}$ ($77e_{1}12$)