$$\text{termodel} \begin{cases} \tilde{o} \in U \\ U^n \xrightarrow[\text{n-stellig}]{f_n} U \ \text{Funktional alg} \\ X \xrightarrow[\text{Belegung}]{\alpha} U: \quad \alpha \in U^X \end{cases}$$

$$\bigwedge \alpha \in U^X \bigwedge t \in \overline{O \uplus X} \bigvee_{\text{char}}^{\text{eind}} \overset{\vee}{\alpha} t = \overset{\vee}{t} \alpha \in U \begin{cases} \overset{\vee}{\alpha} x = \alpha x \\ \overset{\vee}{\alpha} o = \tilde{o} \\ \overset{\vee}{\alpha} \underline{s_n t_1 \cdots t_n} = f_n \underline{\overset{\vee}{\alpha} t_1} \cdots \underline{\overset{\vee}{\alpha} t_n} \end{cases}$$

$$u \in U \ni \begin{cases} \tilde{o} = \tilde{o} \\ \tilde{s}_n \underline{t_1 | u_1 \cdots t_n | u_n} = f_n \underline{u_1 \cdots u_n} \\ \tilde{x} = \alpha x \end{cases}$$

$$\overset{\text{Rek}}{\underset{\text{Satz}}{\Rightarrow}} \bigvee_* \overset{\vee}{\alpha} \underline{s_n t_1 \cdots t_n} = \tilde{s}_n \underline{t_1 | \overset{\vee}{\alpha} t_1 \cdots t_n | \overset{\vee}{\alpha} t_n} = f_n \underline{\overset{\vee}{\alpha} t_1 \cdots \overset{\vee}{\alpha} t_n}$$

$$t \in \overline{O \uplus X}: \quad \alpha{:}\beta \in U^X: \quad \alpha \underset{|t|}{=} \beta \Rightarrow_* \overset{\vee}{\alpha} t = \overset{\vee}{\beta} t$$

$$\text{Ind}: \quad O \uplus X \subset \frac{t \in \overline{O \uplus X}}{\bigwedge_{\alpha:\beta} *} \underset{\text{abg}}{\subseteq} \overline{O \uplus X} \begin{cases} |x| = (x) \Rightarrow_{\text{Vor}} \alpha x = \beta x \Rightarrow \overset{\vee}{\alpha} x = \alpha x = \beta x = \overset{\vee}{\beta} x \\ |o| = \varnothing: \quad \overset{\vee}{\alpha} o = \tilde{o} = \overset{\vee}{\beta} o \\ |s_n t_1 \cdots t_n| = |t_1| \uplus \cdots \uplus |t_n| \Rightarrow_{\text{Vor}} \alpha \underset{|t_i|}{=} \beta \Rightarrow_{\text{Ind}} \overset{\vee}{\alpha} t_i = \overset{\vee}{\beta} t_i \end{cases}$$

$$\Rightarrow_{\text{Rek}} \overset{\vee}{\alpha} \overline{s_n t_1 \cdots t_n} = \tilde{s}_n \underline{\overset{\vee}{\alpha} t_1} \cdots \underline{\overset{\vee}{\alpha} t_n} = \tilde{s}_n \underline{\overset{\vee}{\beta} t_1} \cdots \underline{\overset{\vee}{\beta} t_n} = \overset{\vee}{\beta} \overline{s_n t_1 \cdots t_n}$$

$$\overline{O \uplus X} \ \text{abg} \ \Rightarrow \bigwedge_{s_n \in \mathcal{F}_n} \overline{O \uplus X}^n \xrightarrow[\text{n-stellig}]{s_n} \overline{O \uplus X}$$

$$X \xrightarrow[\text{term Belegung}]{\gamma} \overline{O \uplus X}: \quad \gamma \in \overline{O \uplus X}^X: \quad X \xrightarrow[\text{iden Bel}]{\iota} \overline{O \uplus X}: \quad \overset{\vee}{\iota} t = t$$

$$\gamma_x^z y = \begin{cases} \gamma y & y \neq a \\ z & y = x \end{cases}$$

$$\overset{\text{term}}{\underset{\text{ext}}{\Rightarrow}} \overline{O \uplus X} \ni \overset{\vee}{t} \gamma = \overset{\vee}{\gamma} t: \quad \overset{\vee}{\gamma} x = \gamma x: \quad \overset{\vee}{\gamma} s_0 = s_0: \quad \overset{\vee}{\gamma} s_n t_1 \cdots t_n = s_n \underline{\overset{\vee}{\gamma} t_1} \cdots \underline{\overset{\vee}{\gamma} t_n}$$