$$\begin{split} \bar{r} &= \bar{v} \times \bar{o} \\ \bar{s} &= \bar{o} \times \bar{u} \\ \bar{n} &= \bar{u} \times \bar{v} \\ k_r &= \bar{r} \cdot (\bar{C}_a - \bar{V}) \\ k_s &= \bar{s} \cdot (\bar{C}_a - \bar{V}) \\ k_n &= \bar{n} \cdot (\bar{C}_a - \bar{V}) \\ x(\theta, v) &= \frac{\bar{r} \cdot D_- A(\theta, v) + k_r \delta(\theta, v)}{\bar{n} \cdot D_- A(\theta, v) + k_s \delta(\theta, v)} \\ y(\theta, v) &= \frac{\bar{s} \cdot D_- A(\theta, v) + k_s \delta(\theta, v)}{\bar{n} \cdot D_- A(\theta, v) + k_s \delta(\theta, v)} \end{split}$$

where

$$\bar{v} \in \mathbb{R}^{3}$$

$$\bar{o} \in \mathbb{R}^{3}$$

$$\bar{u} \in \mathbb{R}^{3}$$

$$\bar{V} \in \mathbb{R}^{3}$$

$$\bar{C}_{a} \in \mathbb{R}^{3}$$

$$\theta \in \mathbb{R}$$

$$v \in \mathbb{R}$$

$$D_{A} \in \mathbb{R}, \mathbb{R} \to \mathbb{R}^{3}$$

$$\delta \in \mathbb{R}, \mathbb{R} \to \mathbb{R}$$