$$\begin{split} \bar{r} &= \bar{v} \times \bar{o} \\ \bar{s} &= \bar{o} \times \bar{u} \\ \bar{n} &= \bar{u} \times \bar{v} \\ k_{r} &= \bar{r} \cdot (C_{a} - V) \\ k_{s} &= \bar{s} \cdot (C_{a} - V) \\ k_{n} &= \bar{n} \cdot (C_{a} - V) \\ x(\theta, v) &= \frac{\bar{r} \cdot D_{-} A(\theta, v) + k_{r} \delta(\theta, v)}{\bar{n} \cdot D_{-} A(\theta, v) + k_{s} \delta(\theta, v)} \\ y(\theta, v) &= \frac{\bar{s} \cdot D_{-} A(\theta, v) + k_{s} \delta(\theta, v)}{\bar{n} \cdot D_{-} A(\theta, v) + k_{n} \delta(\theta, v)} \end{split}$$

where

$$ar{v} \in \mathbb{R}^3$$
 $ar{o} \in \mathbb{R}^3$
 $ar{u} \in \mathbb{R}^3$
 $V \in \mathbb{R}^3$
 $C_a \in \mathbb{R}^3$
 $\theta \in \mathbb{R}$
 $v \in \mathbb{R}$
 $D_A \in \mathbb{R}, \mathbb{R} \to \mathbb{R}^3$
 $\delta \in \mathbb{R}, \mathbb{R} \to \mathbb{R}$