$$\begin{array}{ccc}
\mathbf{P}_1 & \xrightarrow{\ f_1\ } & \mathbf{S}_1 \\[-2pt]
& \mathbf{DP} & \\
f \downarrow \quad \mathbf{Pos} & & \mathbf{Pos} \uparrow g \\
\mathbf{P}_2 & \xrightarrow[\ f_2\ ]{\mathbf{DP}} & \mathbf{S}_2
\end{array}$$