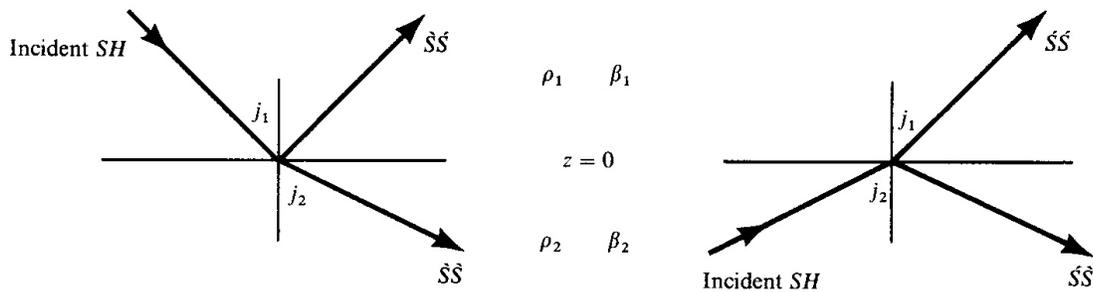


**FIGURE 5.6**  
 The four possible  $P$ - $SV$  reflection/conversion coefficients (displacement amplitude ratios) for a free surface are shown against horizontal slowness  $p$ . See Figure 5.5. In this case,  $\alpha = 5$  km/s and  $\beta = 3$  km/s, and we restrict  $p$  to lie in the range  $0 \leq p \leq 1/\alpha$  so that incidence angle  $i$  is always real. For  $i = 90^\circ$ ,  $\hat{S}\hat{P}$  is quite large ( $\sim 4.1$ ). The left panel shows the whole range of  $p$ . The right panel shows an expanded view of the range just less than  $p = 1/\alpha$ .



**FIGURE 5.7**  
 Notation for the four possible reflection/transmission coefficients arising for problems of incident  $SH$ -waves.