weighted-sum-split[11,40]

$\forall p, q{:}(\mathbb{Q}\ \text{List}),\ F{:}(\{0..\|p\ @\ q\|^-\}\rightarrow \mathbb{Q})$.
weighted-sum(p @ q;F) = (weighted-sum(p;F) + weighted-sum(q;$\lambda i.F(i+\|p\|)$)) $\in \mathbb{Q}$

http://www.nuprl.org/FDLcontent/p0_963683_/p62_121334_{weighted-sum-split}.html