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1  |----- MODULE BufferStateSpace -----|
   | The buffer (i.e., sequence) representation of state space used in AJupiter. This module defines |
   | generalized OT functions on operation sequences. |
6  | EXTENDS Naturals, SequenceUtils |
7  |-----|
8  | RECURSIVE xFormOpOps(-, -, -) Transform op against an operation sequence ops. |
9  | xFormOpOps(xform(-, -), op, ops)  $\triangleq$  |
10 | IF ops =  $\langle \rangle$  THEN  $\langle op \rangle$  Maintain and return the intermediate transformed operations. |
11 | ELSE  $\langle op \rangle \circ xFormOpOps(xform, xform(op, Head(ops)), Tail(ops))$  |
13 | xFormOpsOp(xform(-, -), ops, op)  $\triangleq$  Transform an operation sequence ops against op. |
14 | LET opX  $\triangleq xFormOpOps(xform, op, ops)$  |
15 | IN [  $i \in 1 \dots Len(ops) \mapsto xform(ops[i], opX[i])$  ] |
17 | xFormFull(xform(-, -), op, ops)  $\triangleq$  |
18 | [ $xop \mapsto Last(xFormOpOps(xform, op, ops))$ , |
19 |  $xops \mapsto xFormOpsOp(xform, ops, op)$ ] |
21 | xFormShift(xform(-, -), op, ops, shift)  $\triangleq$  shift of ops |
22 | xFormFull(xform, op, SubSeq(ops, shift + 1, Len(ops))) |
23 |-----|
   \ * Modification History
   \ * Last modified Thu Jan 17 10:30:18 CST 2019 by hengxin
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