```
15-Jun-90 10:42:39 {DSK}<usr>local>lde>lispcore>internal>library>AR-PIECETREE-PATCH.;2
 File created:
  changes to:
                 (VARS AR-PIECETREE-PATCHCOMS)
                 (FNS TEDIT.FAST.RAW.INCLUDE AR.PIECE.CHANGED)
previous date:
                20-Apr-90 12:21:43 {DSK}<usr>local>lde>lispcore>internal>library>AR-PIECETREE-PATCH.;1
 Read Table:
                INTERLISP
    Package:
                INTERLISP
       Format:
                  XCCS
"; Copyright (c) 1990 by Venue & Xerox Corporation. All rights reserved.
(RPAQQ AR-PIECETREE-PATCHCOMS ((COMS
                                              ;; PATCH for AREDIT for TEDIT modification. (Replace piece table info balanced tree.)
                                              ;; following functions depend on piece table structure.
                                              (FILES TEDITDECLS)
                                              (FNS TEDIT.FAST.RAW.INCLUDE AR.PIECE.CHANGED))))
;; PATCH for AREDIT for TEDIT modification. (Replace piece table info balanced tree.)
;; following functions depend on piece table structure
(FILESLOAD TEDITDECLS)
(DEFINEQ
(TEDIT.FAST.RAW.INCLUDE
                                                                             ; Edited 15-Jun-90 10:42 by jds
  [LAMBDA (TEXTSTREAM INSTREAM START END INSERTCH#)
      takes a text stream and an OPEN stream to include at character INSERTCH#. Note: Start and End are inclusive ptrs, unlike in copybytes and
     ;; friends. No interpretation (alternate file type e.g. Bravo) takes place. INSTREAM is not copied, so you'd better not be changing it.
     (LET* [(TEXTOBJ (TEXTOBJ TEXTSTREAM))
             (PCTB (fetch (TEXTOBJ PCTB) of TEXTOBJ))
             (INSPC# (OR (\CHTOPCNO INSERTCH# PCTB)
                           (INDEX (fetch CHNUM of (\LASTNODE PCTB))
                                   PCTB)))
             (INSPC (fetch PCE of (FINDNODE-INDEX PCTB INSPC#)))
             (LEN (- (OR END (GETEOFPTR INSTREAM))
                                                                             ; INSPC is the piece to make the insertion in
                       (OR START (SETQ START 0]
            (COND
               ([AND (NEQ INSPC 'LASTPIECE)
                       (> INSERTCH# (fetch CHNUM of (FINDNODE-INDEX PCTB INSPC#]
                                                                             : Must split the piece.
                 (SETQ INSPC (\SPLITPIECE INSPC INSERTCH# TEXTOBJ INSPC#))
                 (add INSPC# 1)))
            (\TEDIT.INSERT.PIECES TEXTOBJ INSERTCH#
                    (create PIECE
                                   _ INSTREAM
                            PFILE
                            PFPOS _ START
PLEN _ LEN
                            PREVPIECE _ NIL
                            NEXTPIECE
                                          NIL
                            PLOOKS _ (fetch (TEXTOBJ DEFAULTCHARLOOKS) of TEXTOBJ)
                            PPARALAST _ NIL

PPARALOOKS _ (fetch (TEXTOBJ FMTSPEC) of TEXTOBJ))
                    LEN INSPC INSPC#)
            (add
                 (fetch (TEXTOBJ TEXTLEN) of TEXTOBJ)
                  LEN1)
(AR.PIECE.CHANGED
  [LAMBDA (TEXTOBJ TEXTSTREAM CH# REFSTREAM START LEN)
                                                                             ; Edited 15-Jun-90 10:42 by ids
     ;; Compares TEXTOBJ/TEXTSTREAM at position CH# with the contents of REFSTREAM from filepointer START for the next LEN bytes. If they're
    ;; different, returns T.
    ;; Do this by comparing pieces. This is fast in the average case (the piece is unchanged), and takes into account the fact that the textstream may ;; be backed by REFSTREAM, so file pointers would step on each other.
           ((PCTB (fetch (TEXTOBJ PCTB) of TEXTOBJ))
             (PIECE# (\CHTOPCNO CH# PCTB))
             PIECE)
            (if (NULL PIECE#)
                then
                                                                             ; Shouldn't happen
              else
                   (SETQ PIECE (fetch PCE of (FINDNODE-INDEX PCTB PIECE#)))
                    (do (if (ATOM PIECE)
                             then
                                                                             : Shouldn't happen
                                   (RETURN NIL))
                        (if [NOT (if (EQ (fetch (PIECE PFILE) of PIECE)
                                          REFSTREAM)
                                      then
                                                                              Same as reference stream--they're same if starts match.
                                                                             ; assume different otherwise
```

```
(= (fetch (PIECE PFPOS) of PIECE)
START)

else

(SETFILEPTR TEXTSTREAM (SUB1 CH#))
(SETFILEPTR REFSTREAM START)
(to (fetch (PIECE PLEN) of PIECE) always (EQ (BIN TEXTSTREAM)
(BIN REFSTREAM]

then (RETURN T))
(if (> (SETQ LEN (- LEN (fetch (PIECE PLEN) of PIECE)))

0)
then (add START (fetch (PIECE PLEN) of PIECE))
(add CH# (fetch (PIECE PLEN) of PIECE))
(SETQ PIECE (fetch (PIECE NEXTPIECE) of PIECE))
else
(RETURN NIL])

(PUTPROPS AR-PIECETREE-PATCH COPYRIGHT ("Venue & Xerox Corporation" 1990))
```

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FUNCTION INDEX	
AR.PIECE.CHANGED1	TEDIT.FAST.RAW.INCLUDE