File created:	15-Jun-90 10:42:39 **{DSK}<usr>local>lde>lispcore>internal>library>AR-PIECETREE-PATCH.;2**
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

```
(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**
```
  [LAMBDA (TEXTSTREAM INSTREAM START END INSERTCH#)              ; Edited 15-Jun-90 10:42 by jds
```

;; 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))
                   (OR START (SETQ START 0]                      ; INSPC is the piece to make the insertion in
      (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
                     PFILE _ INSTREAM
                     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)
           LEN])
```

(**AR.PIECE.CHANGED**
```
  [LAMBDA (TEXTOBJ TEXTSTREAM CH# REFSTREAM START LEN)           ; Edited 15-Jun-90 10:42 by jds
```

;; 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.

```
    (LET* ((PCTB (fetch (TEXTOBJ PCTB) of TEXTOBJ))
           (PIECE# (\CHTOPCNO CH# PCTB))
           PIECE)
      (if (NULL PIECE#)
          then                                                   ; Shouldn't happen
               T
        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                                      ; Somewhere else, so compare byte by byte
                            (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                                      ; That's all the way to the end, so we succeeded
                    (RETURN NIL])

)

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

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