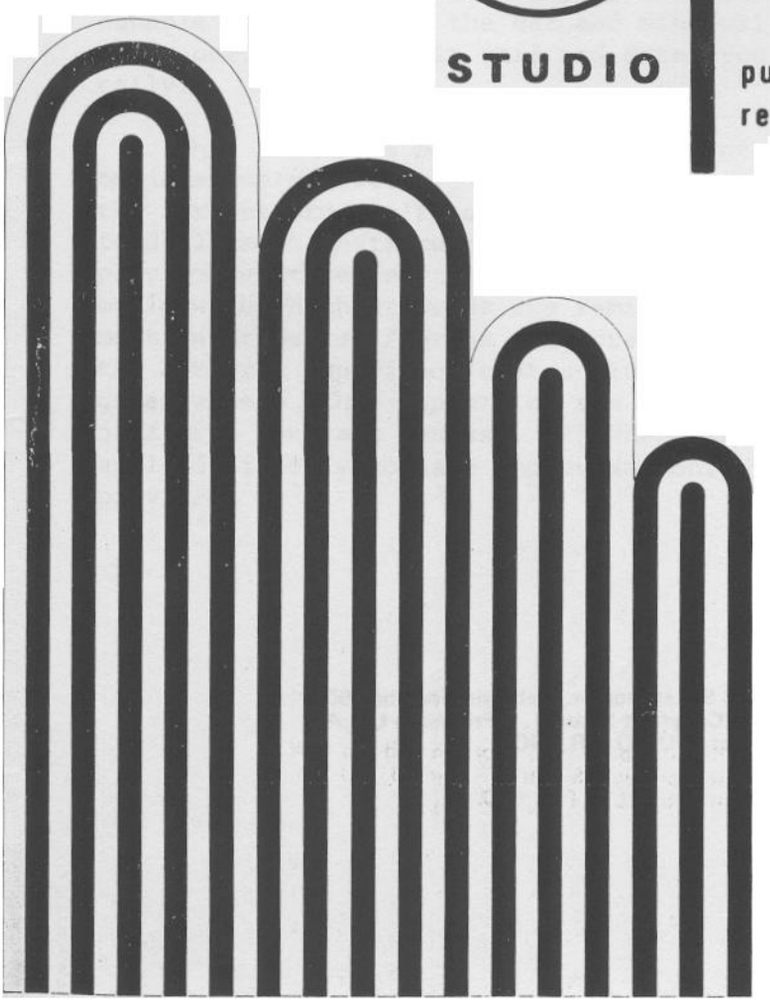
TECHNIQUE DEVELOPMENT IN FOURTHS for JAZZ IMPROVISATION

by RAMON RICKER



STUDIO
publications
recordings

INTRODUCTION

In the improvisatory style of many well-known jazz artists, the perfect fourth has become an integral part of their harmonic and melodic vocabulary. In an effort to make their music unique from bebop, many post-bop players, such as Jackie Byard and Joe Farrell, began incorporating patterns in perfect fourth intervals into their improvised lines. During this same period in jazz history, many pianists began experimenting with left-hand voicings based on quartal harmony. This technique of integrating fourths into jazz improvisation began perhaps around 1960 and continues to this day.

This book is for the advanced player--the musician who wishes to add yet another harmonic dimension to his improvisations. It can only be a beginning--a tool that opens a door. It is up to the student to walk through that door and explore the contents of the room. Perhaps the most important point a student must remember when using this or any other improvisation method is to *learn it, master it,* then *forget it. Do not let the "rules" get in the way of your music.*

Mastery of the fourth is extremely difficult. In a conversation with the author, Joe Farrell once said it took him a year of diligent practice before he could successfully apply fourths to his improvisations. Experience has shown the author that rules concerning this interval are not that important. *First be able to play them in exercises.* Once the fingers are capable of execution, the ear and mind will be in a position to dictate their use. When all is said and done, you must play musically and melodically.

This book does not take the place of other, more comprehensive books on jazz improvisation. It is a supplement, another tool to aid and expand the serious student's harmonic and melodic vocabulary. Its purpose is twofold. 1) Most instrumentalists (both jazz and non-jazz) cannot fluently play consecutive fourth intervals. One of the reasons is that most of the music with which students are familiar is based on thirds. In addition, on most instruments, fourths are more difficult to execute than thirds. It is the author's experience that a fluent technique with this interval will greatly help other aspects of the student's technique whether it is in a jazz or a non-jazz context. 2) When fourths are mastered, they can be applied directly to jazz improvisation. For this reason chord changes are provided.

Many recent jazz and jazz/rock compositions use as a harmonic framework a relatively small number of chord changes. Freddie Hubbard's *Straight Life*, Keith Jarrett's *Sorcery*, and *Chameleon* by Herbie Hancock are three examples. This style of composition is in sharp contrast to bebop music, with chord changes every measure or even every two beats. Frequently, composers employ both harmonic elements in their music; that is, a tune harmonized with fast harmonic rhythm but a set of more simple changes reserved for "blowing." Joe Farrell's *Sound Down* is an excellent example.

Soloing over a set of changes with slow harmonic rhythm in a sense frees the improviser, and allows him greater harmonic freedom. It is in this circumstance that patterns in fourths are most useful, or at any rate easiest to handle.

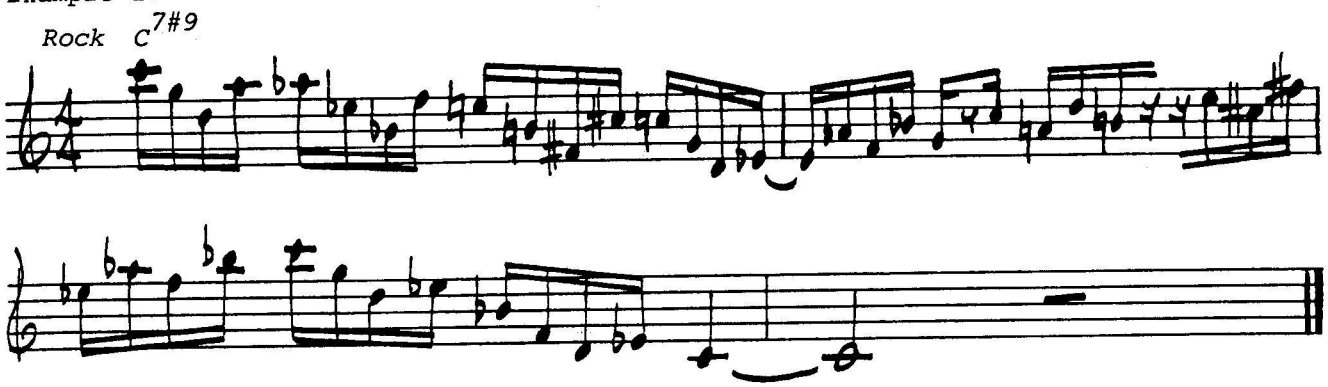
When soloing over a pedal point, a soloist can venture quite far from the chord changes and still sound convincing. In other words, as irrational as it may sound, *you can play about anything you want over a pedal point if you begin and end properly.* In fact, it is very desirable for the soloist under these circumstances to be able to convincingly venture away from the changes. One way to successfully "take it out" is to play chain sequences, more simply called patterns. If a soloist begins with a melodic idea that is compatible with the chord change of that instance, he can continue the pattern without regard to the chords being sounded against it. The pattern, because it maintains its own integrity, will sound correct even though in some instances its notes may be quite dissonant with the chord the rhythm section is playing. It can be carried as far as the soloist wishes, broken and resolved.

As an interesting sidelight, the author, from analyzing numerous transcribed solos, has observed that keyboard players generally play a sequence exactly as it theoretically should be. For instance, if Example 1 was an excerpt from a transcribed solo, it would probably be from a keyboard solo. It is theoretically correct. Because of technical limitations, single line instrumentalists frequently make minor deviations in the pattern of intervals. These slight intervalic deviations are only noticed by the most discerning ear, or by analysis of transcribed solos, and do not detract from the overall solo.

In playing chain sequences, the soloist may choose to play a pattern based on thirds, but he can also play one based on fourths. By using fourths he adds another dimension to his solo--something different, something the post-bebop players of today might play. (Ex. 1, 2, 3, 4.)

Example 1 consists of quartal patterns. Descending fourths in major thirds and ascending fourths on a whole-tone scale.

Example 1.



Example 2 outlines a diminished triad.

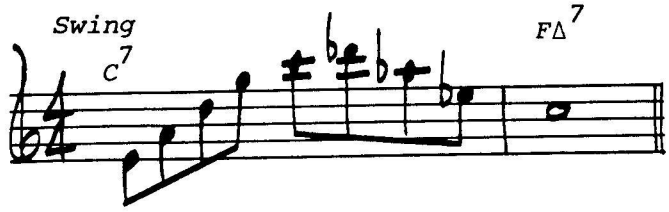
Example 2.

The notes in Example 3 are in complete agreement with the chord, but because of its contour it should be apparent to the reader that melodic fragments of this type cannot be frequently used in a solo. The result would be rather boring to the listener.

Example 3.

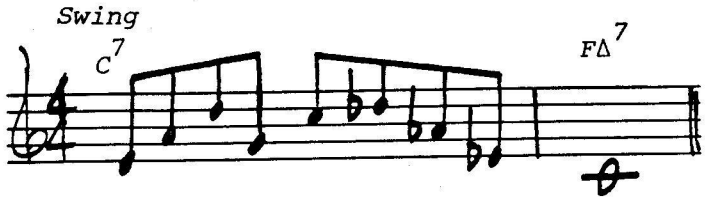
By sliding up a half step above the changes (Ex. 4), a more interesting line is created.

Example 4.



The octave transposition of some of the notes of Example 4 makes the line more manageable. (Ex. 5)

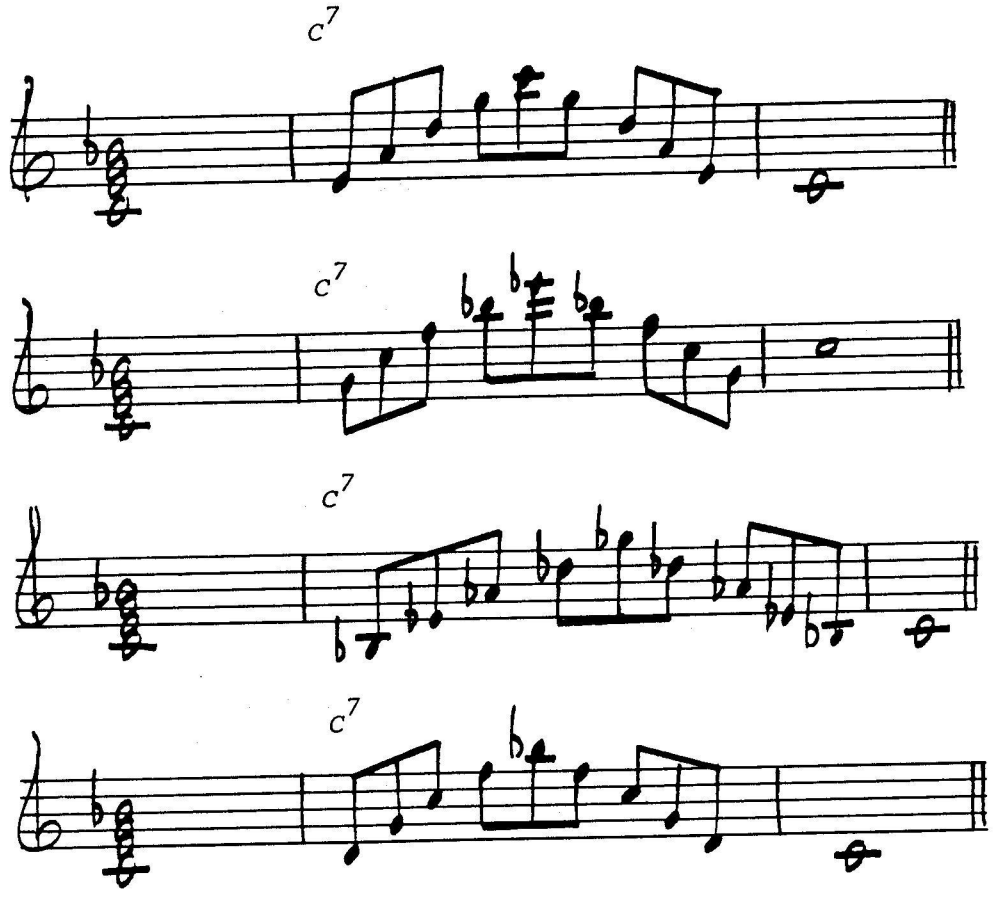
Example 5.



In summary, when playing over one chord, use all the melodic material you usually do, but integrate patterns in fourths into the solo. Use them as a means to "take it out," to change the color, to add interest. Become acquainted with pentatonic scales. Pentatonics and fourths are very similar in their application to jazz improvisation. Consult the author's *Pentatonic Scales for Jazz Improvisations:* Studio P/R, Lebanon, Indiana, 1975.

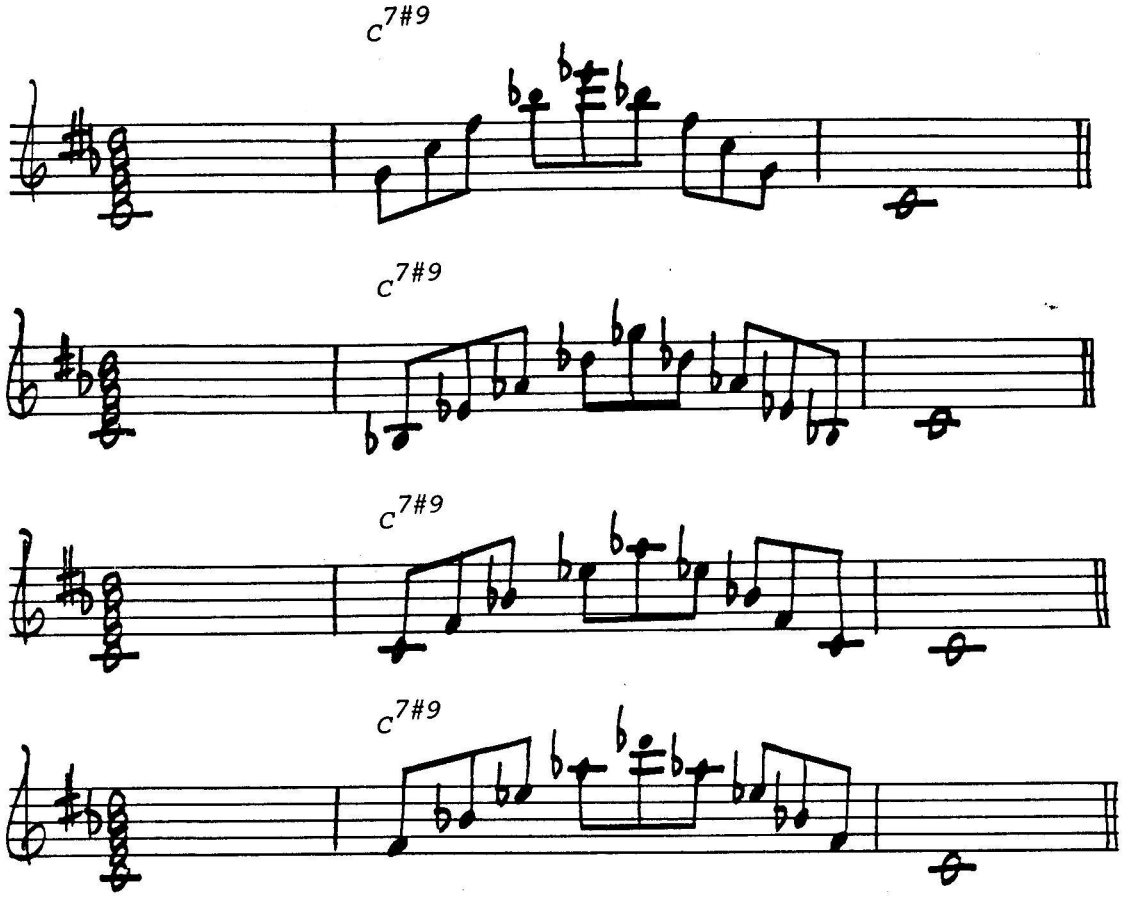
When applying fourths to chord types, some rules can be formulated, but they become very cumbersome and hard to remember. Nevertheless, the following is a series of chords that are used frequently in jazz. Vertical fourth structures that are compatible and sound good with the chord are given, along with some rules for their application. The student is urged to study and play the examples on the piano and on his instrument. The notes are given only as examples, and need not be played exactly as notated. The student is encouraged to change the order and formulate his own "licks." Some of the vertical fourth structures are more "outside" than others, but in all cases these dissonant notes can be analyzed as upper extensions of the chord.

Over a Dominant Seventh Chord (C^7) build up to four consecutive fourths on the 3rd, 5th, b7th or 2nd scale degrees.



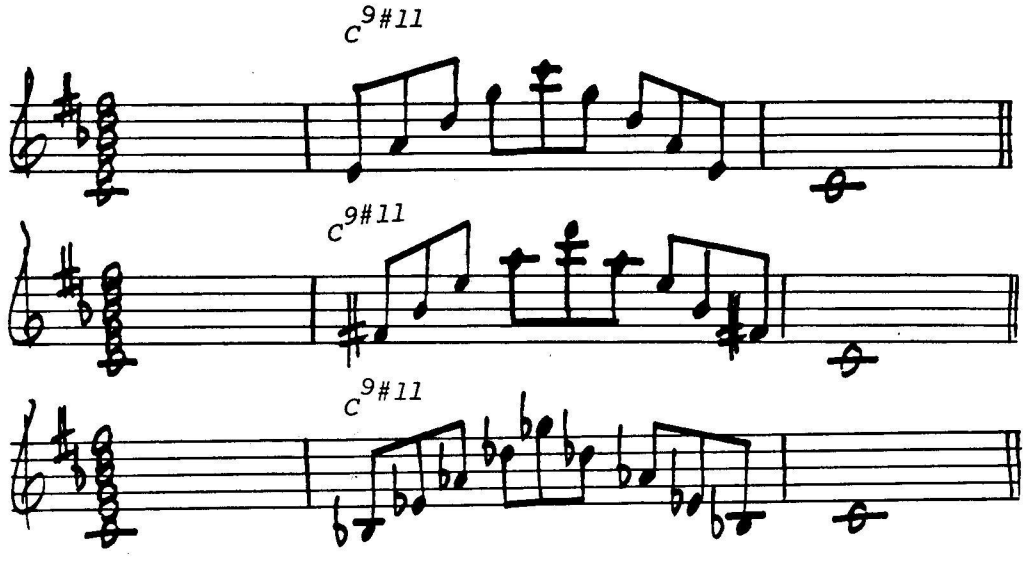
DOMINANT SEVENTH SHARP NINE

Over a Dominant Seventh Sharp Nine ($C^{7\#9}$) build up to four consecutive fourths on the 5th, b7th, root or 4th scale degrees.



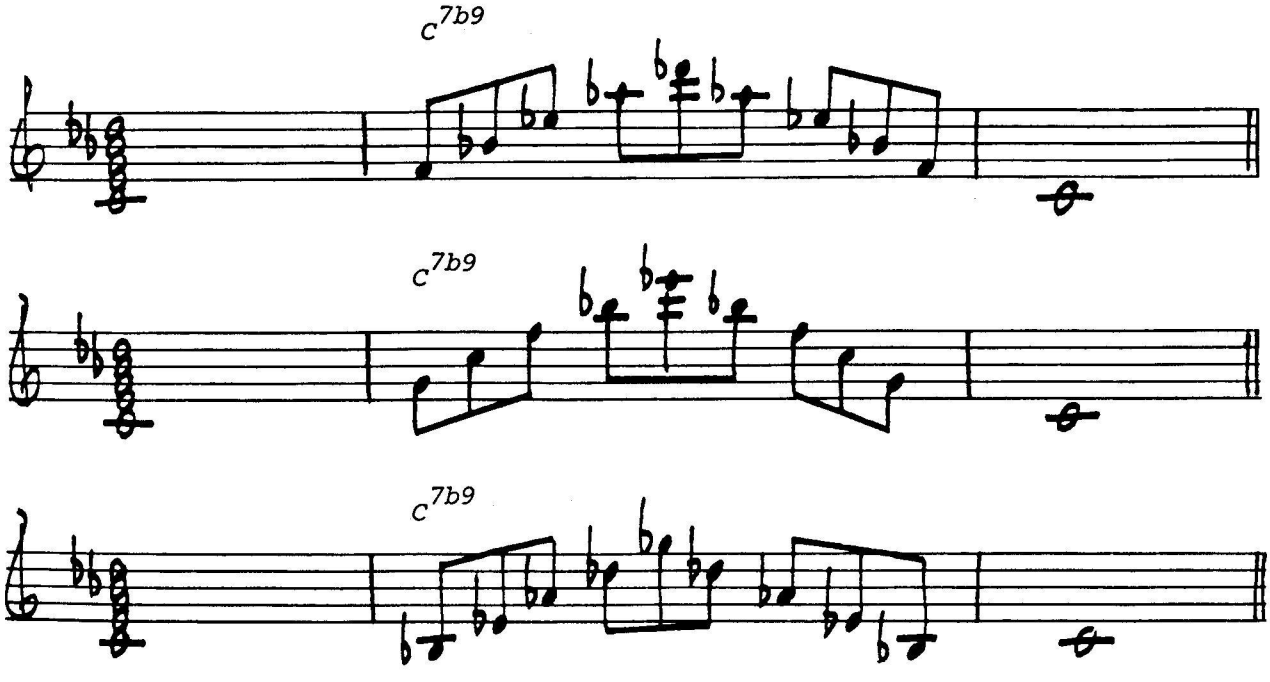
DOMINANT NINTH SHARP ELEVEN

Over a Dominant Ninth Sharp Eleven chord ($C^{9\#11}$) build up to four consecutive fourths on the 3rd, #4th (#11th), or b7th scale degrees.



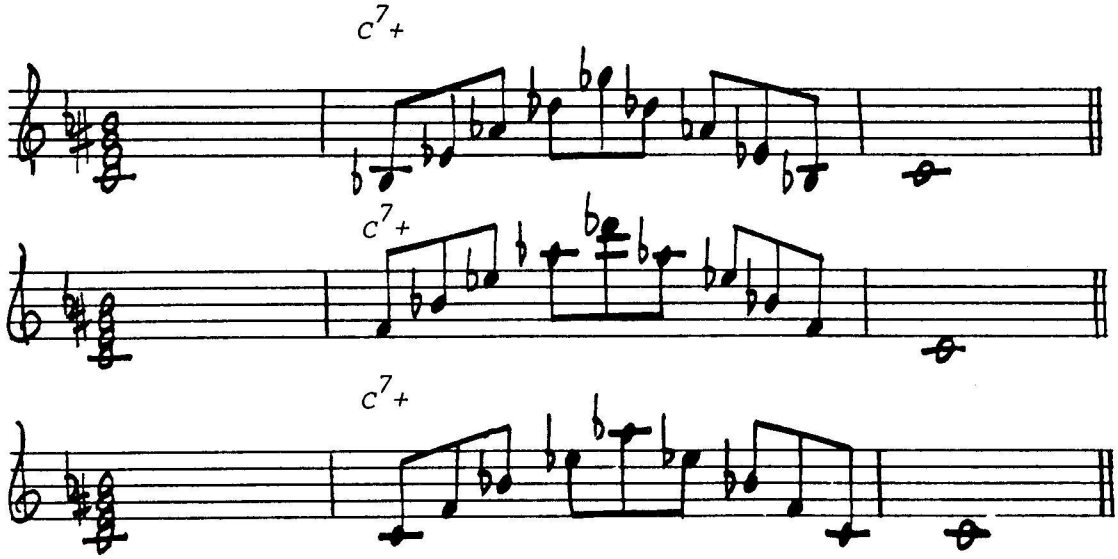
DOMINANT SEVENTH FLAT NINE

Over a Dominant Seventh Flat Nine chord (C^{7b9}) build up to four consecutive fourths on the 4th, 5th, or b7th scale degrees.



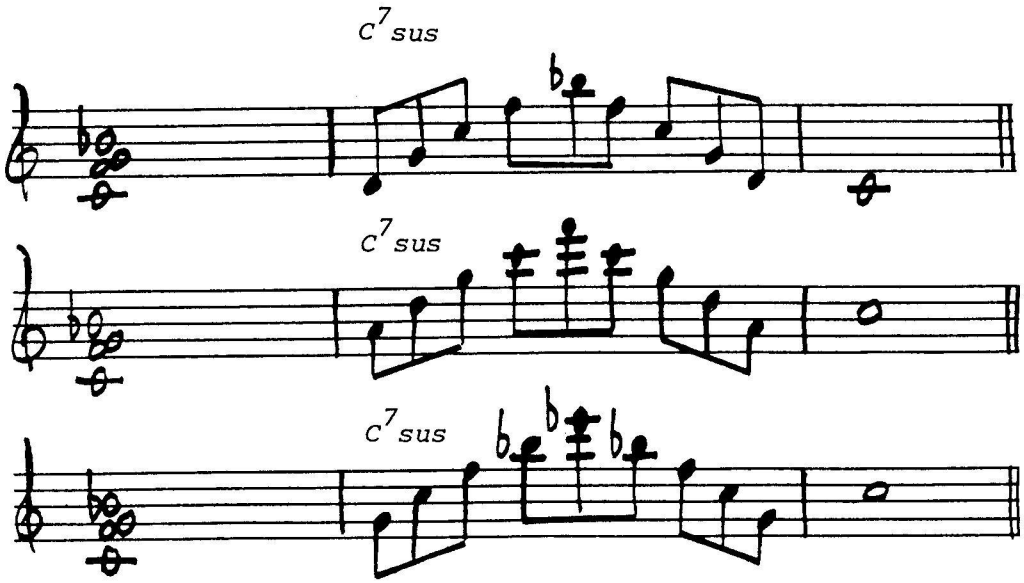
DOMINANT SEVENTH AUGMENTED

Over a Dominant Seventh Augmented Chord (C^7+) build up to four consecutive fourths on the b7th, 4th, or root scale degrees.



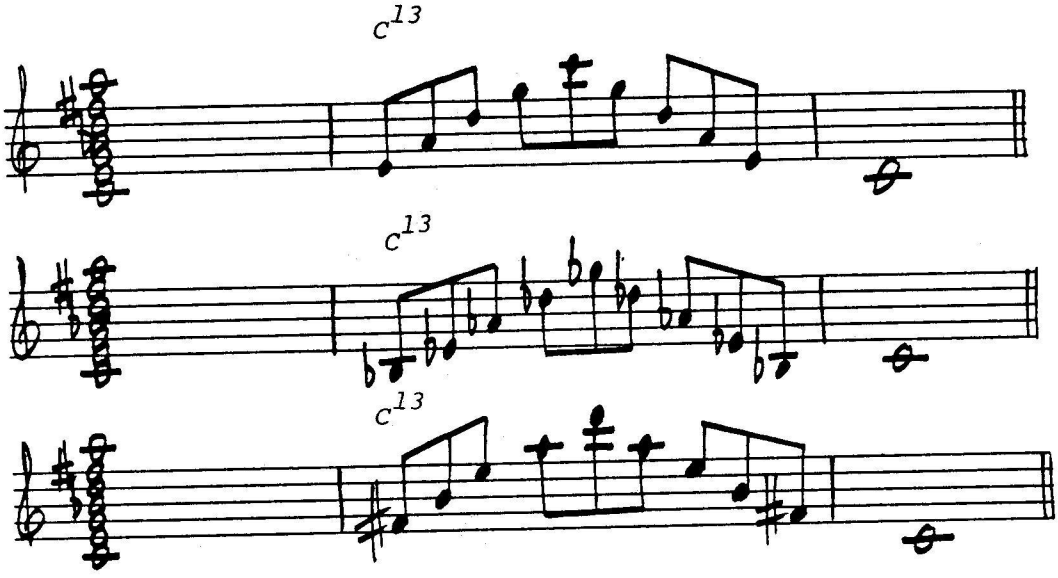
DOMINANT SEVENTH SUSPEND

Over a Dominant Seventh Suspend Chord (C^7sus) build up to four consecutive fourths on the 2nd, 6th, or 5th scale degrees.



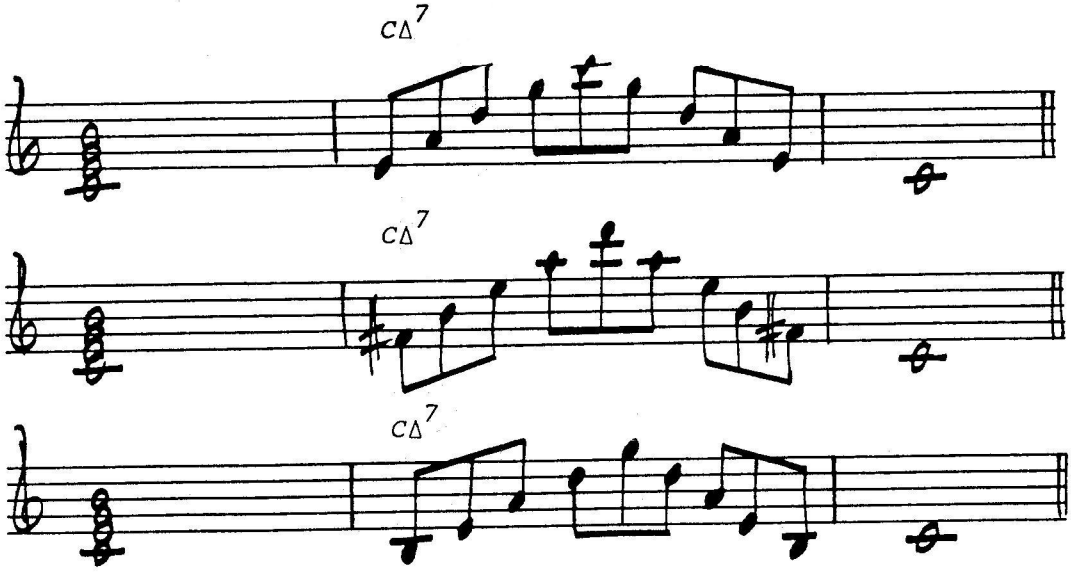
DOMINANT THIRTEENTH

Over a Dominant Thirteenth Chord (C^{13}) build up to four consecutive fourths on the 3rd , b7th, or #4th (#11th) scale degrees.



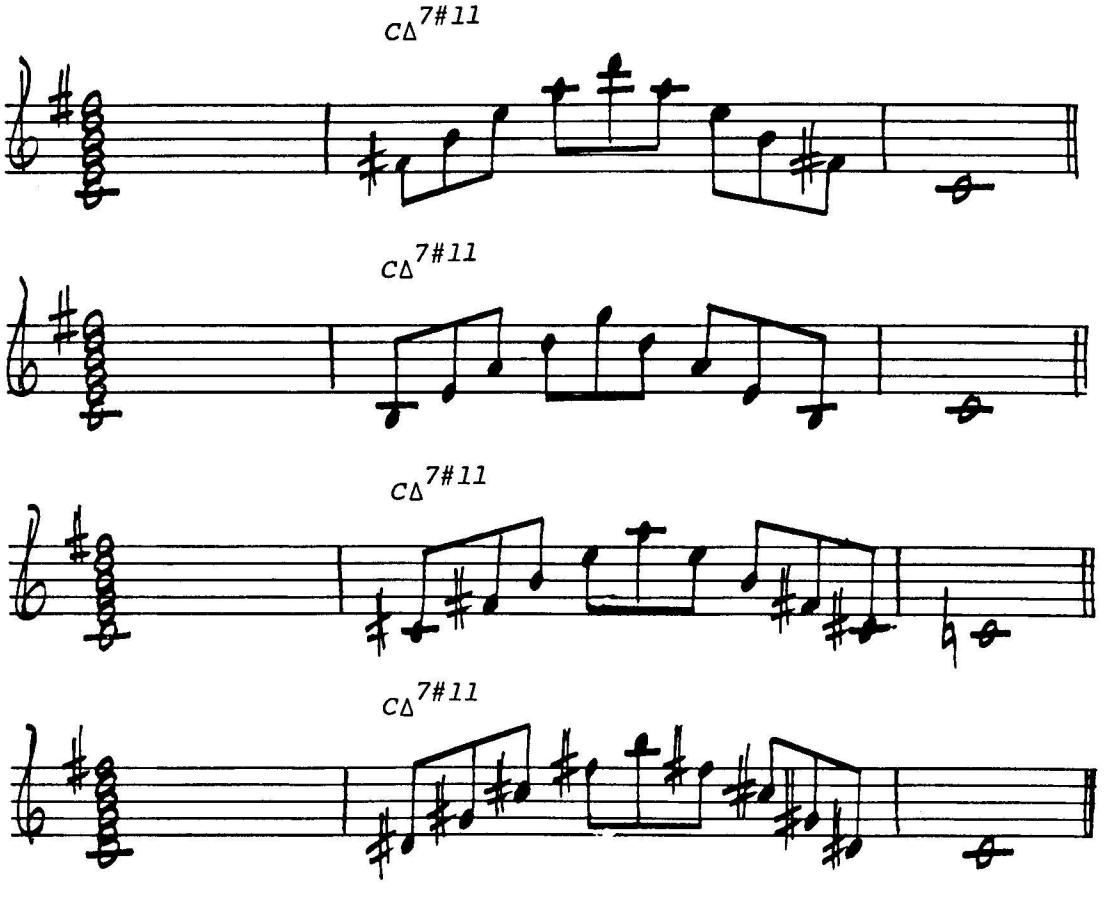
MAJOR SEVENTH

Over a Major Seventh chord build up to four consecutive fourths on the 3rd, #4th (#11th) or 7th scale degrees.



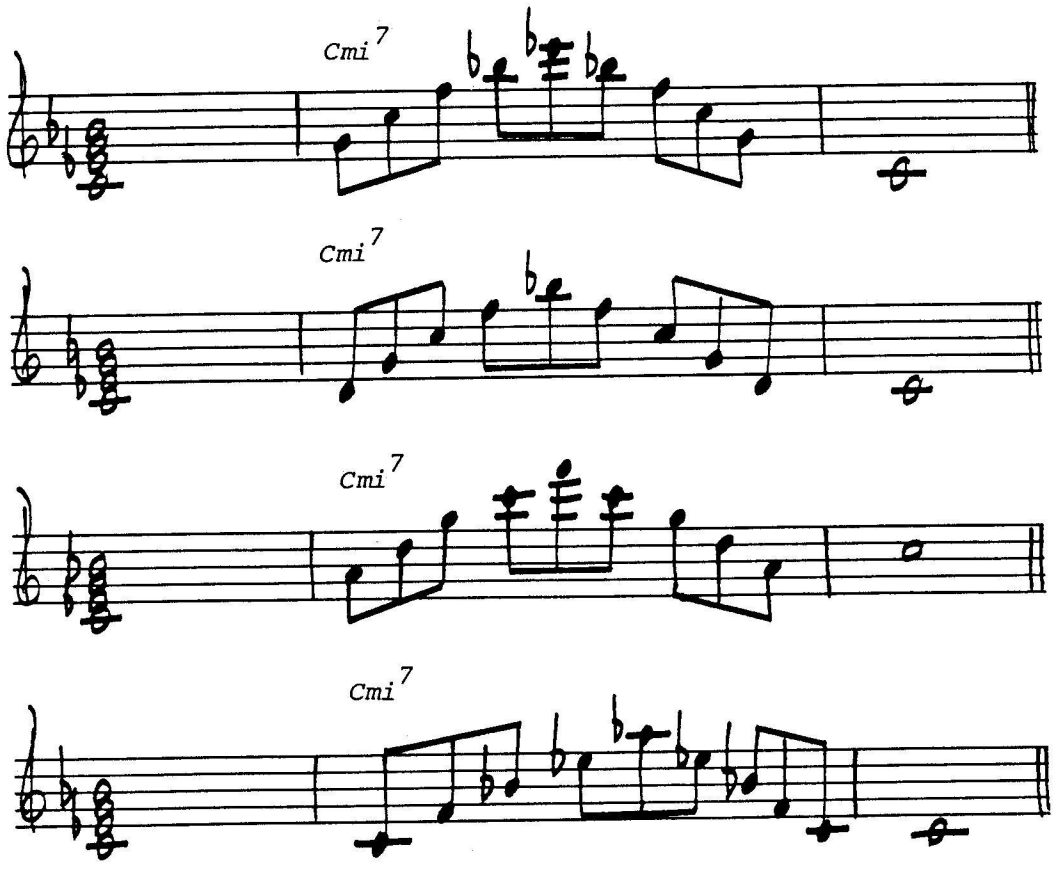
MAJOR SEVENTH SHARP ELEVEN

Over a Major Seventh Sharp Eleven Chord (Cmaj$^{7\#11}$ or C$\Delta^{7\#11}$) build up to four consecutive fourths on the #4th (#11th), 7th, b2nd or b3rd scale degrees. (The fourths on the b2nd and b3rd scale degrees contains some dissonant notes, but they nevertheless can be used effectively.)



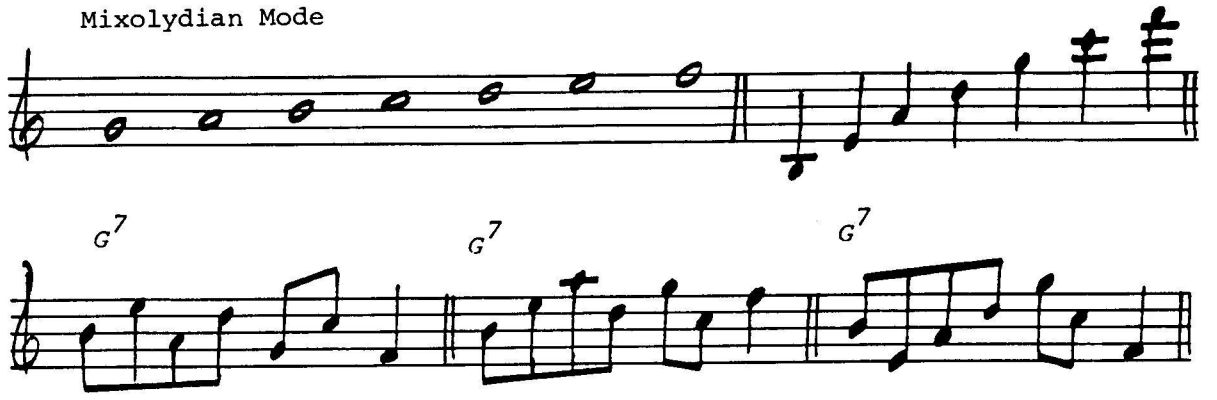
MINOR SEVENTH

Over a Minor Seventh Chord (Cmi^7) build up to four consecutive fourths on the 5th, 2nd, 6th, and root scale degrees.



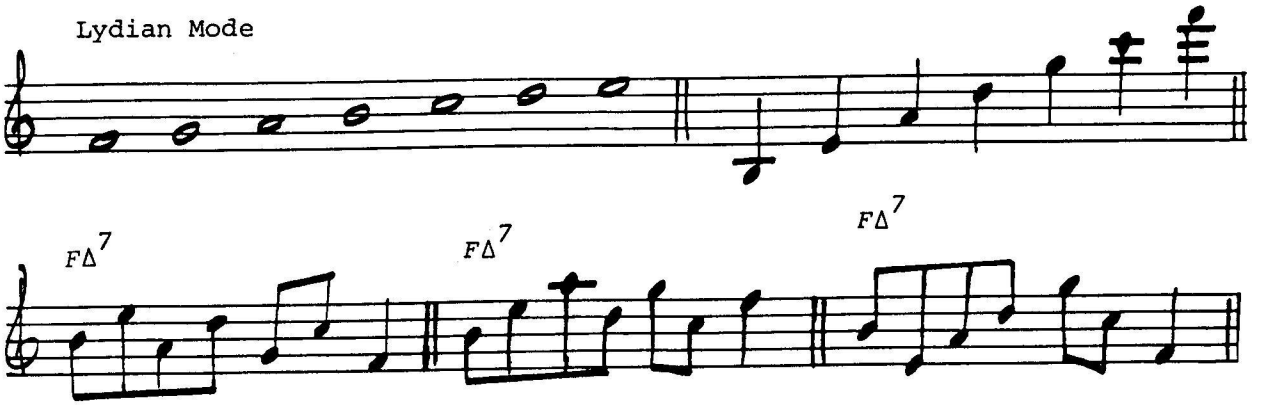
MIXOLYDIAN MODE

To include all notes of the Mixolydian Mode, build perfect fourths on the third scale degree.



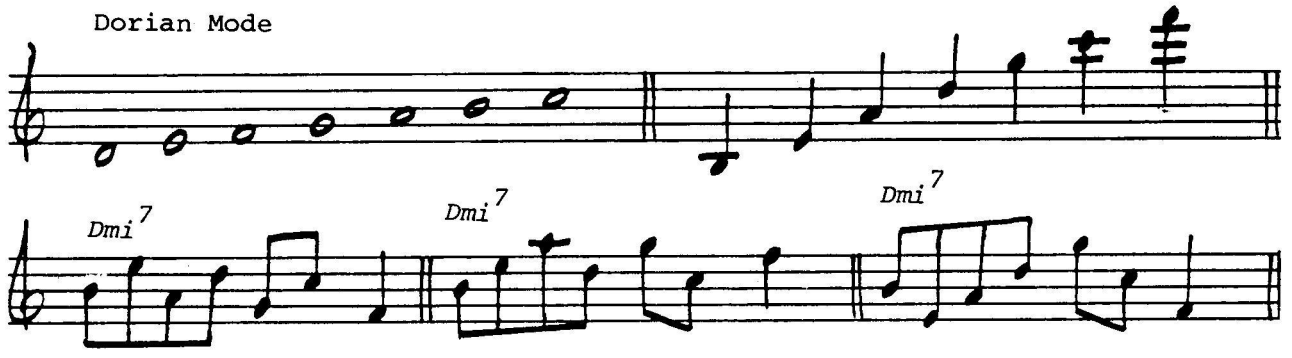
LYDIAN MODE

To include all notes of the Lydian Mode, build perfect fourths on the fourth scale degree.



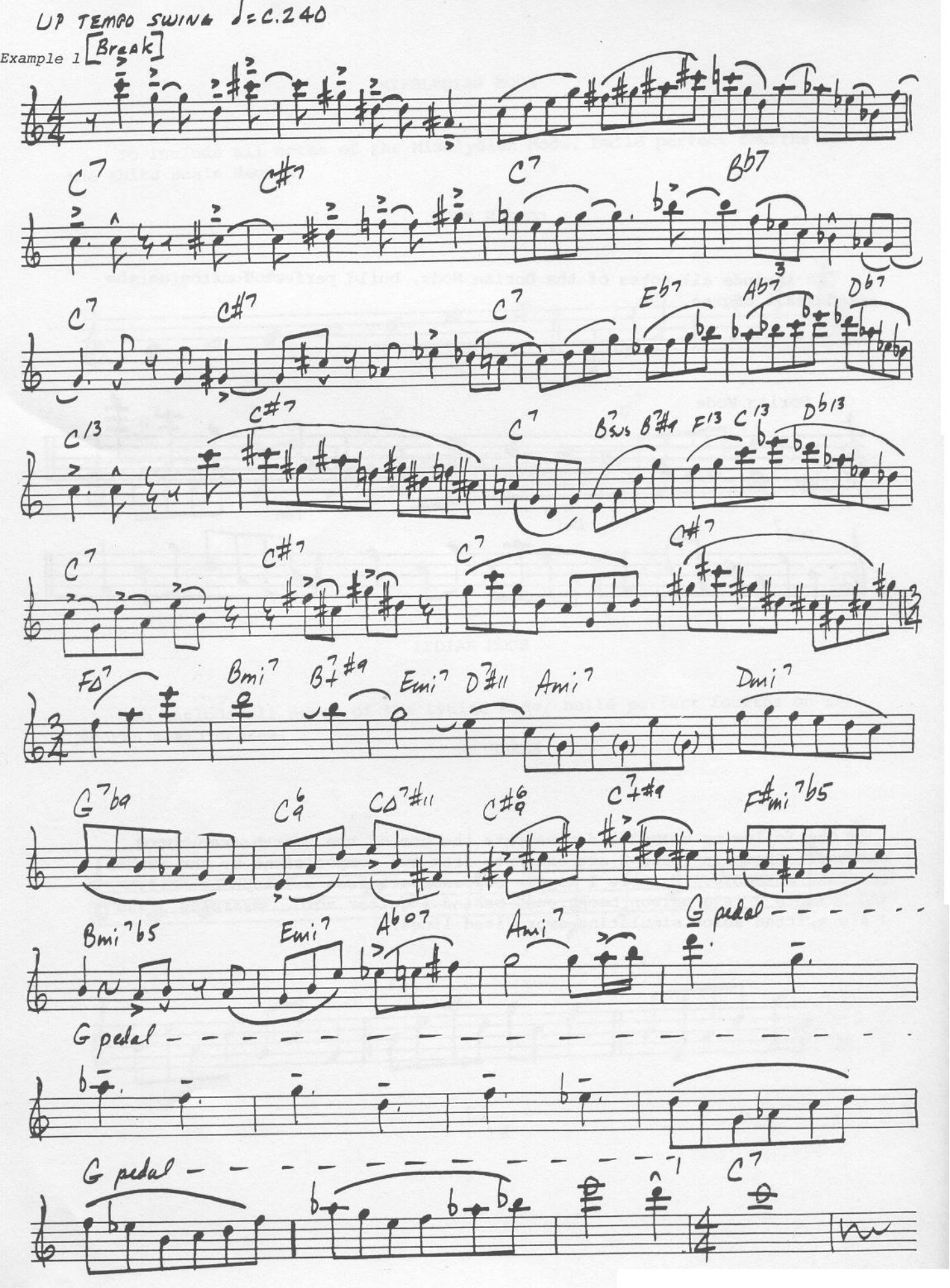
DORIAN MODE

To include all notes of the Dorian Mode, build perfect fourths on the sixth scale degree.

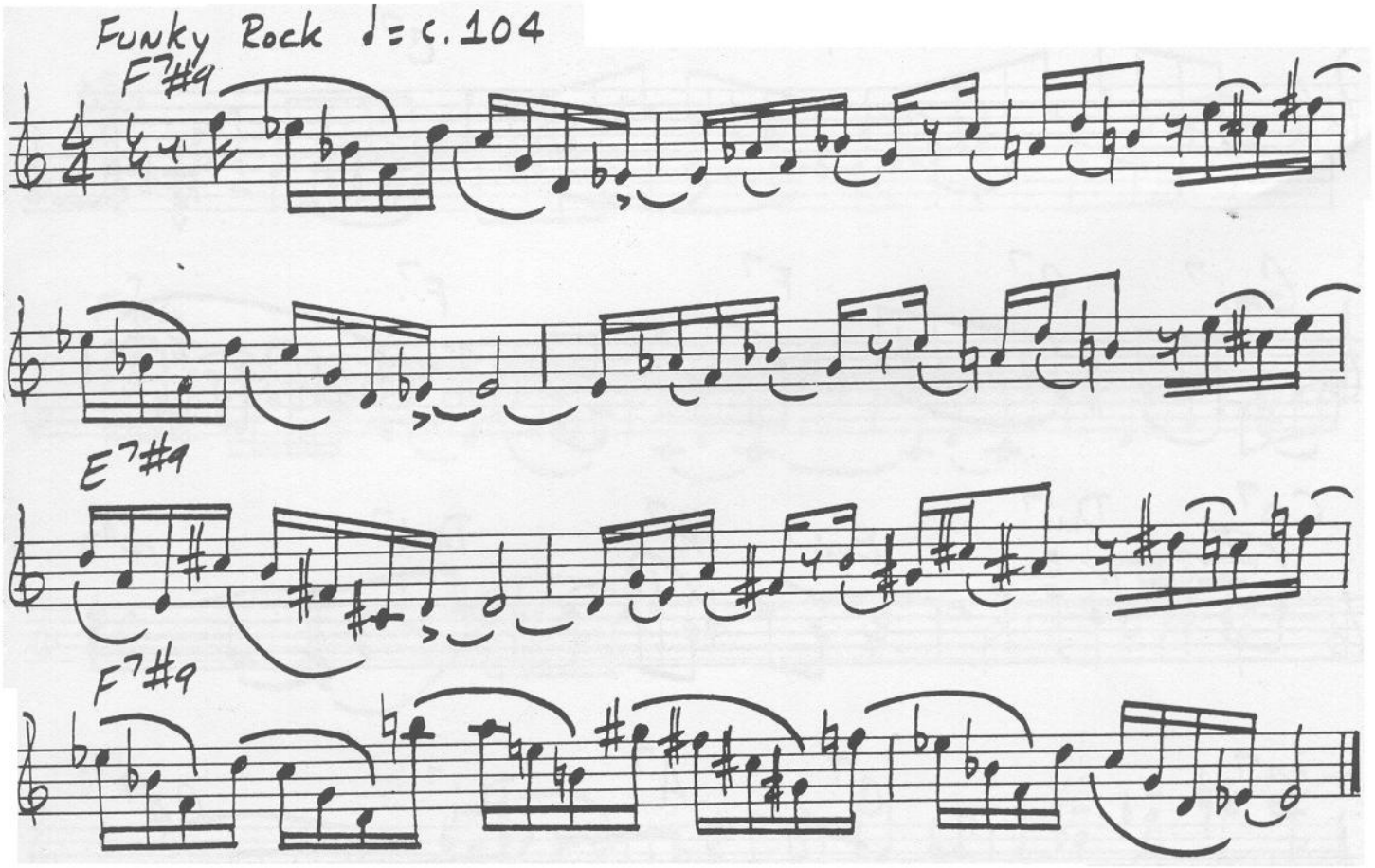


EXAMPLES

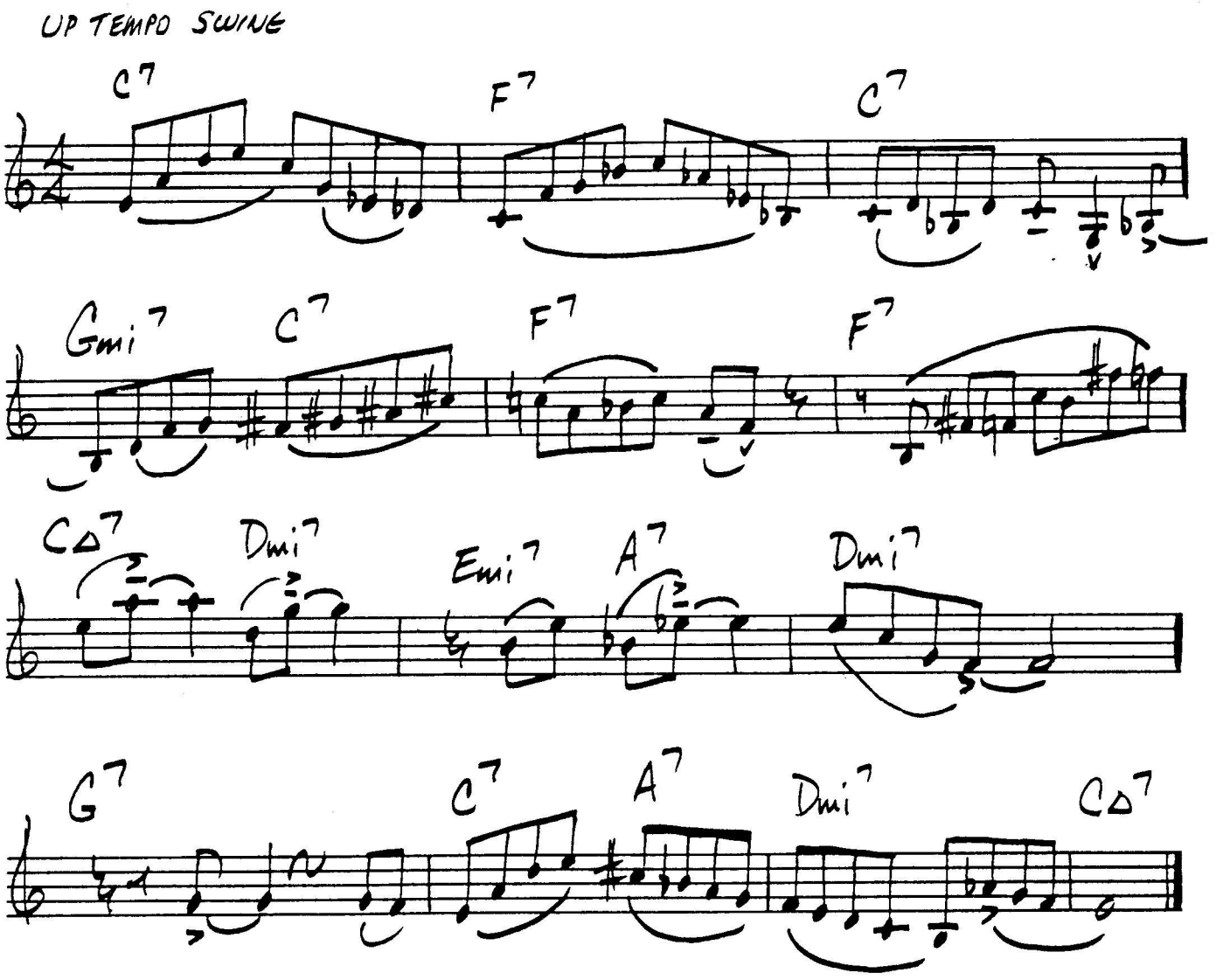
The following examples demonstrate the use of the fourth over chord changes. Examples 1 and 2 are excerpts from two compositions by the author for Jazz Ensemble. Example 1 is the soprano part from a saxophone soli, and Example 2 is a unison background behind a guitar solo. Examples 3 and 4 are written solos simulating improvised lines.


UP TEMPO SWING ♩=c.240
Example 1 [Break]
C7 C#7 C7 Bb7
C7 C#7 C7 Eb7 Ab7 Db7
C13 C#7 C7 B7sus B7#9 F13 C13 Db13
C7 C#7 C7 C#7
F△7 Bmi7 B7#9 Emi7 D7#11 Ami7 Dmi7
G7b9 C9 C△7#11 C#9 C7+#9 F#mi7b5
Bmi7b5 Emi7 Ab07 Ami7 G pedal
G pedal
G pedal
C7

Example 2

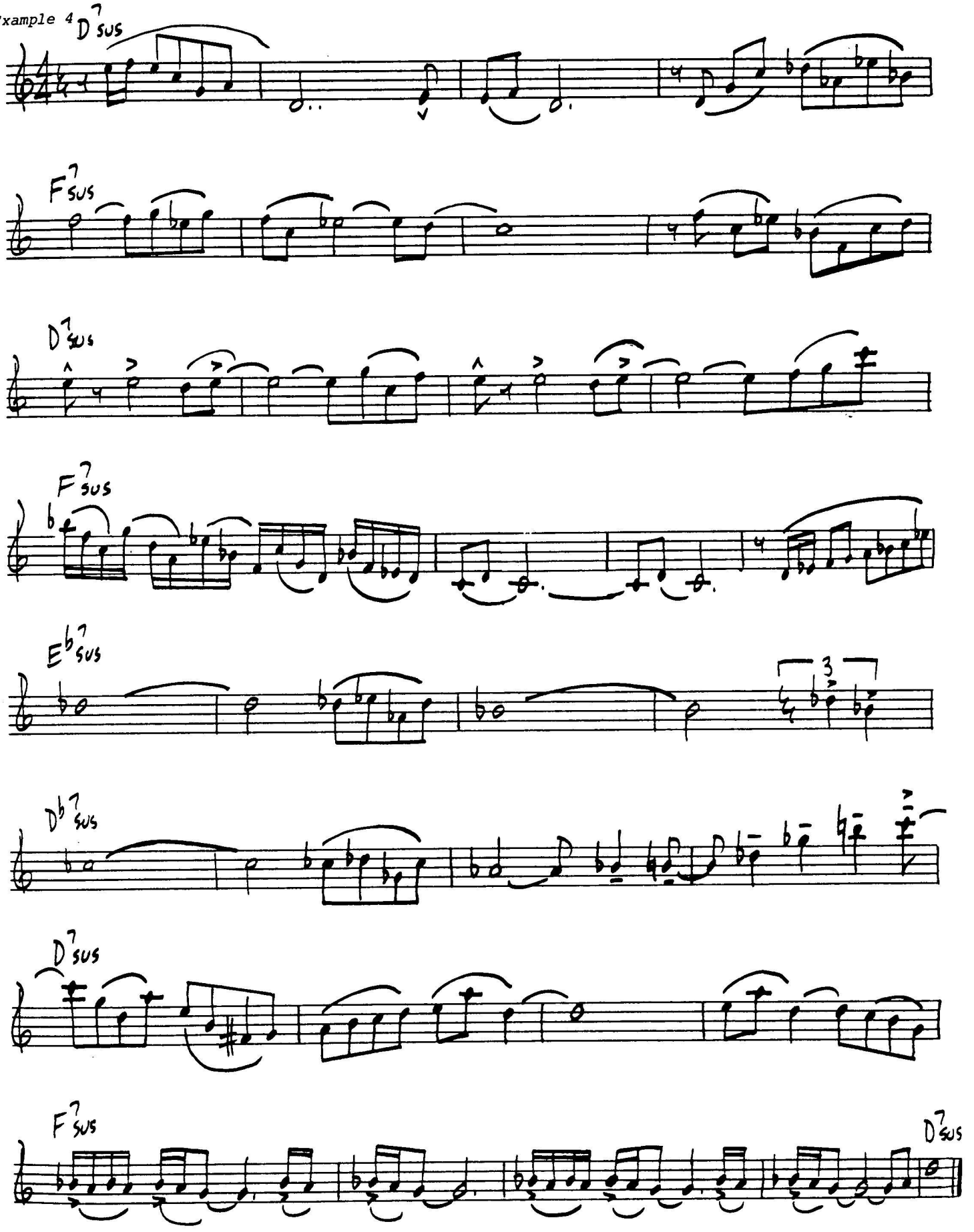


Example 3


UP TEMPO SWING
C7
F7
C7
Gmi7
C7
F7
F7
CΔ7
Dmi7
Emi7
A7
Dmi7
G7
C7
A7
Dmi7
CΔ7

♩= c. 120 (Straight ♪'s

Example 4



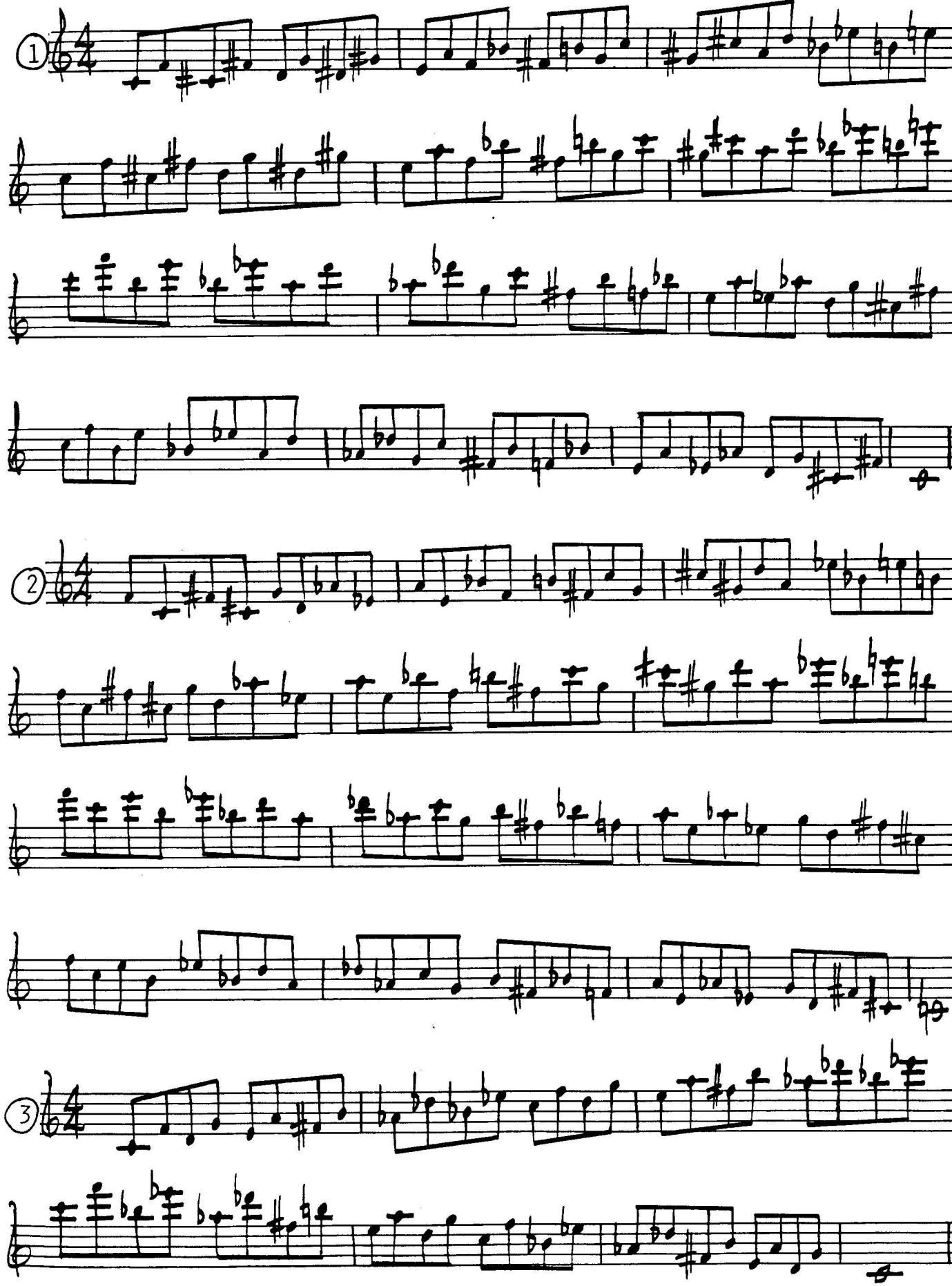
EXERCISES

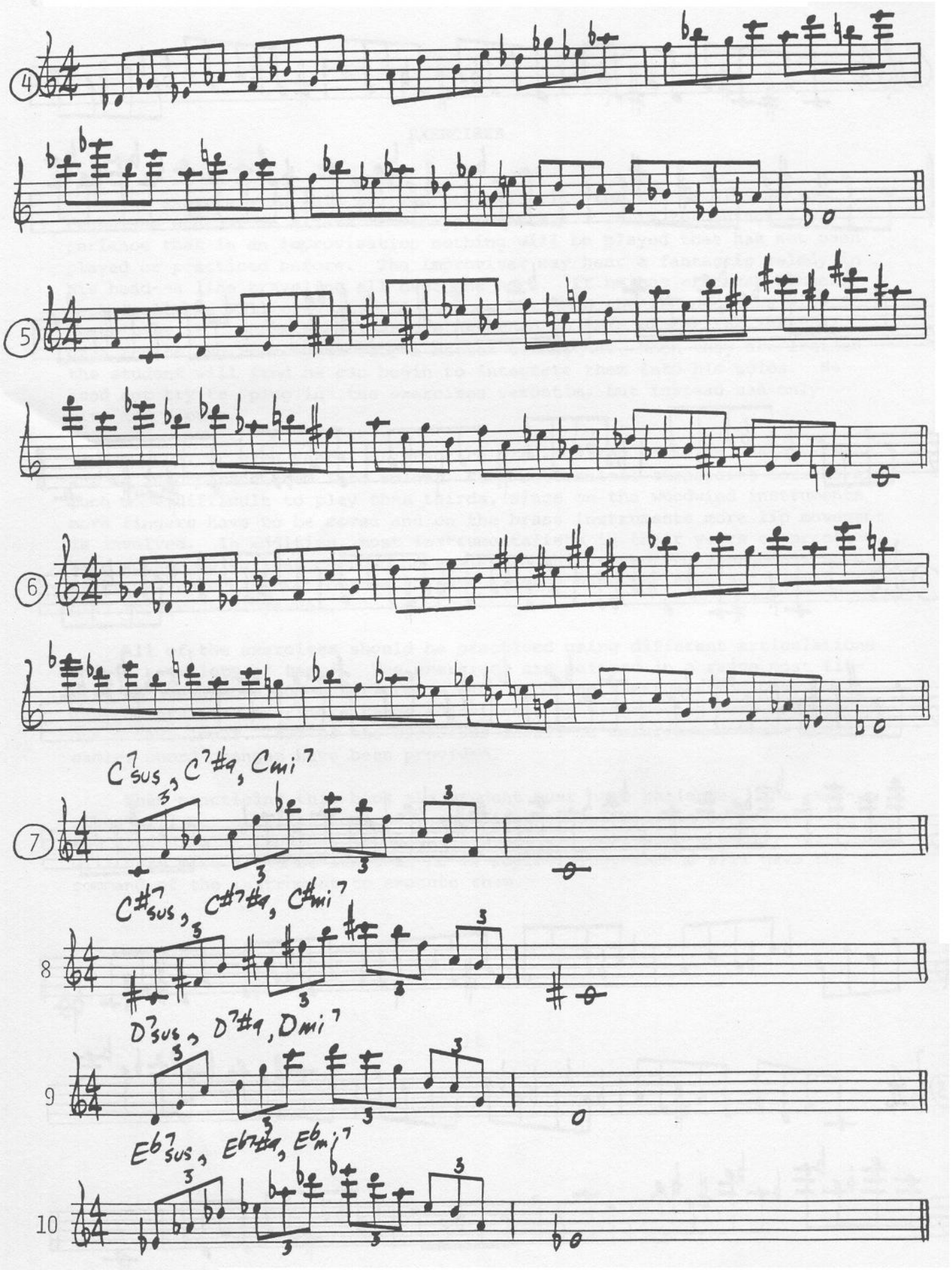
The exercises in this section are basically for the development of technique whether in a jazz or non-jazz context. It is the author's experience that in an improvisation nothing will be played that has not been played or practiced before. The improviser may hear a fantastic melody in his head--a line traveling all over the horn. If he has prepared himself technically he will play it. If he does not have the technique he will never play it. These exercises are designed to help master the interval of a fourth and thereby develop a better technique. When they are learned the student will find he can begin to integrate them into his solos. He need not try to "plug in" the exercises verbatim, but instead use only bits and pieces.

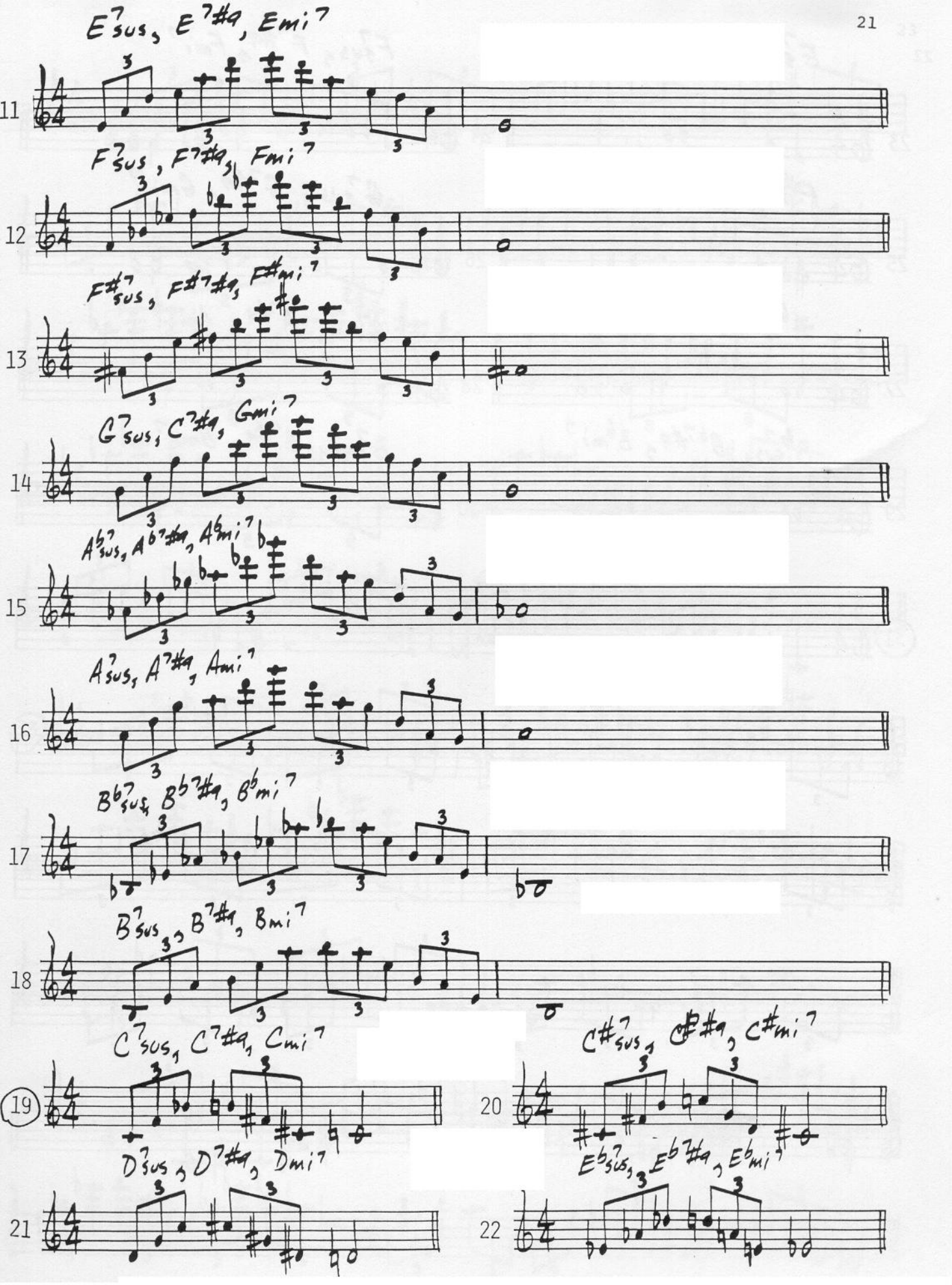
Months, or even years, of practice are required to learn the exercises and to incorporate them into solos. From a technical standpoint fourths are much more difficult to play than thirds, since on the woodwind instruments more fingers have to be moved and on the brass instruments more lip movement is involved. In addition, most instrumentalists in their years of practice, have worked on scales, chords and scales in thirds, but they probably have never played scales in fourths. Their fingers have not been programmed to play this wider interval.

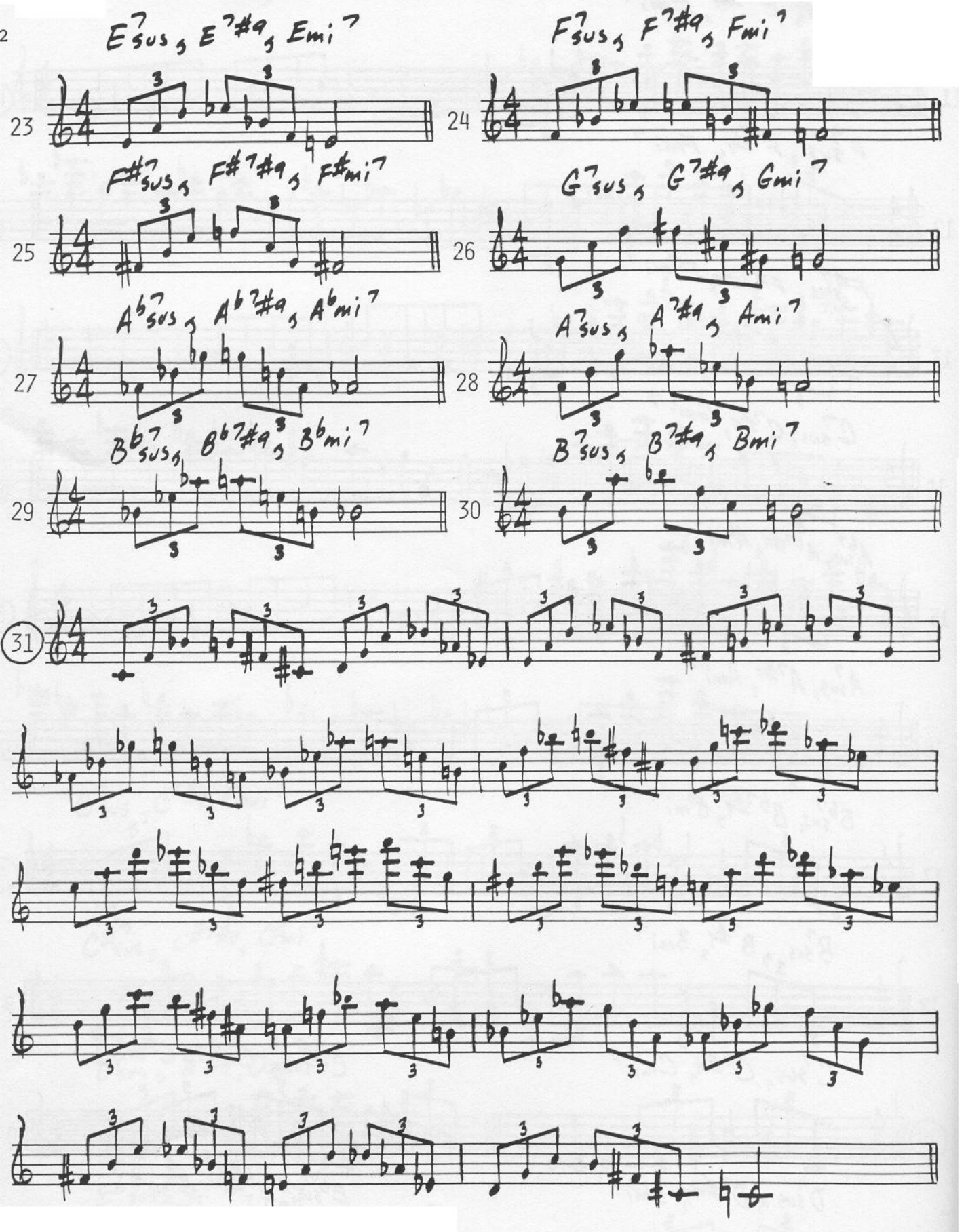
All of the exercises should be practiced using different articulations and in a variety of tempi. The exercises are notated in a range most fitting the saxophone and other treble clef woodwind instruments. Other instrumentalists must make range adjustments by transposing some note groups one octave lower. *All of the exercises should be memorized.* Where applicable, chord changes have been provided.

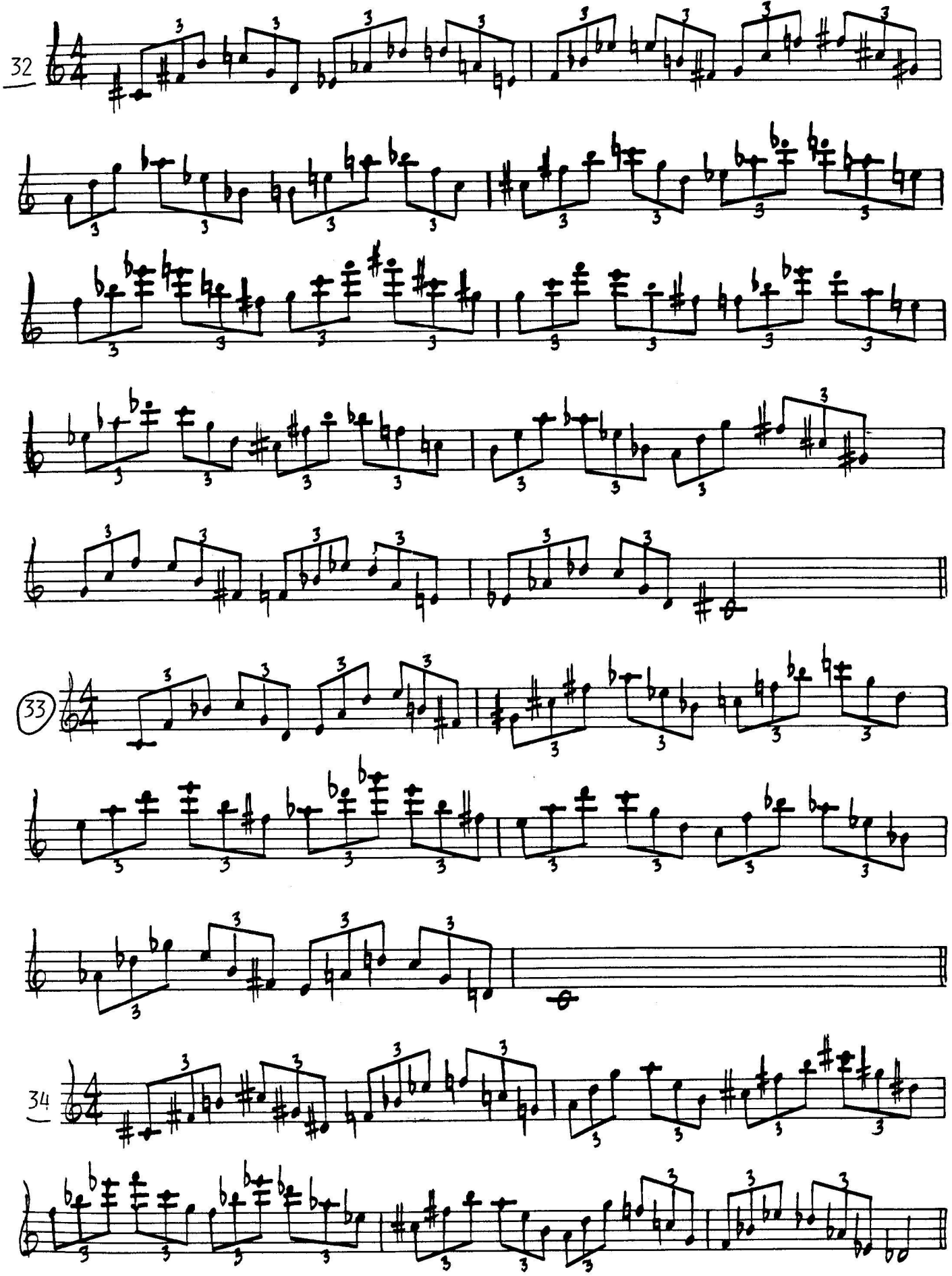
When practicing this book the student must have patience. The exercises will not at first come easy, but if they are diligently practiced the student will find his technique and his ear improving greatly. He will hear more disjunct lines as he is improvising, and he will have the command of the instrument to execute them.

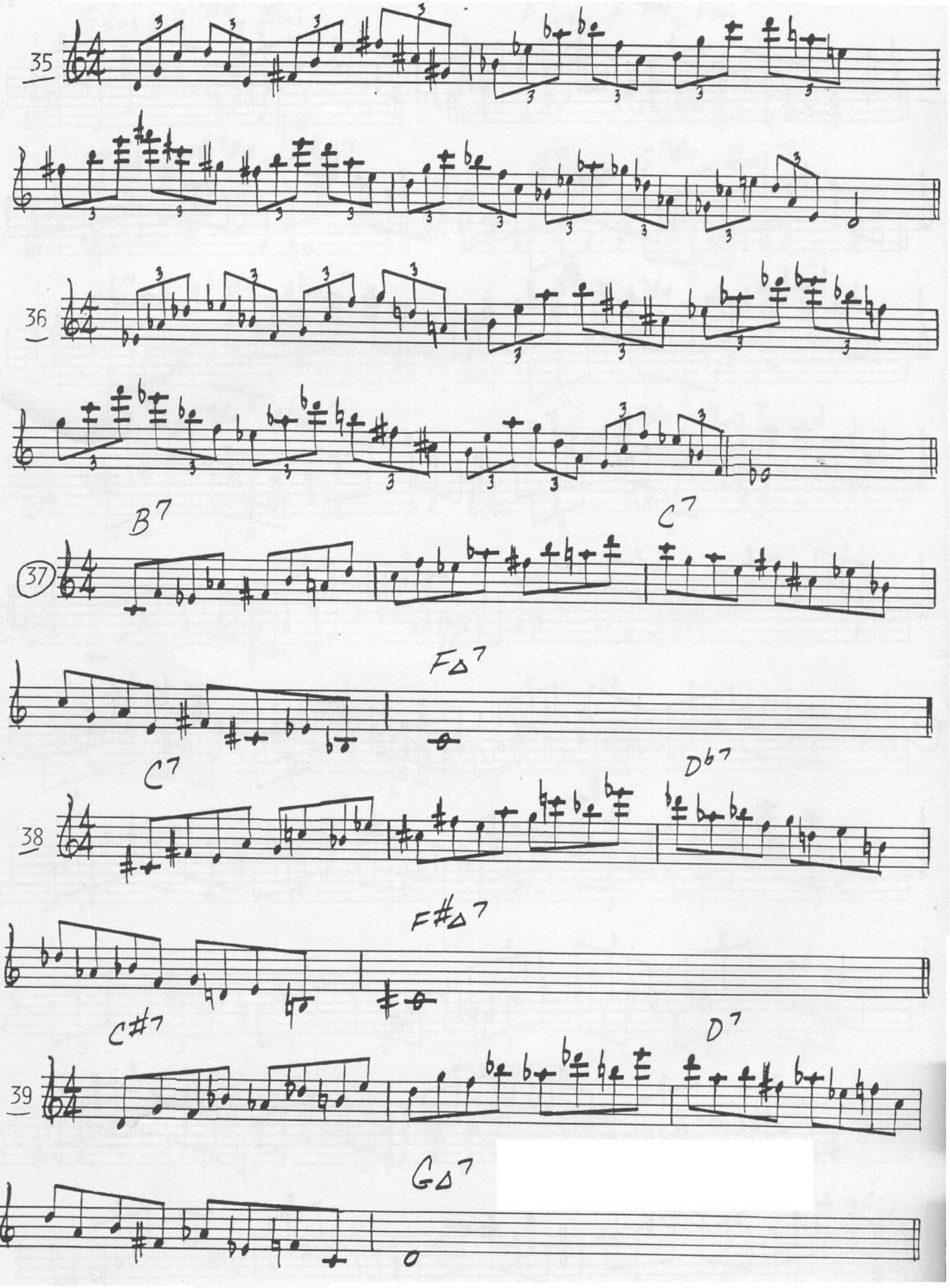


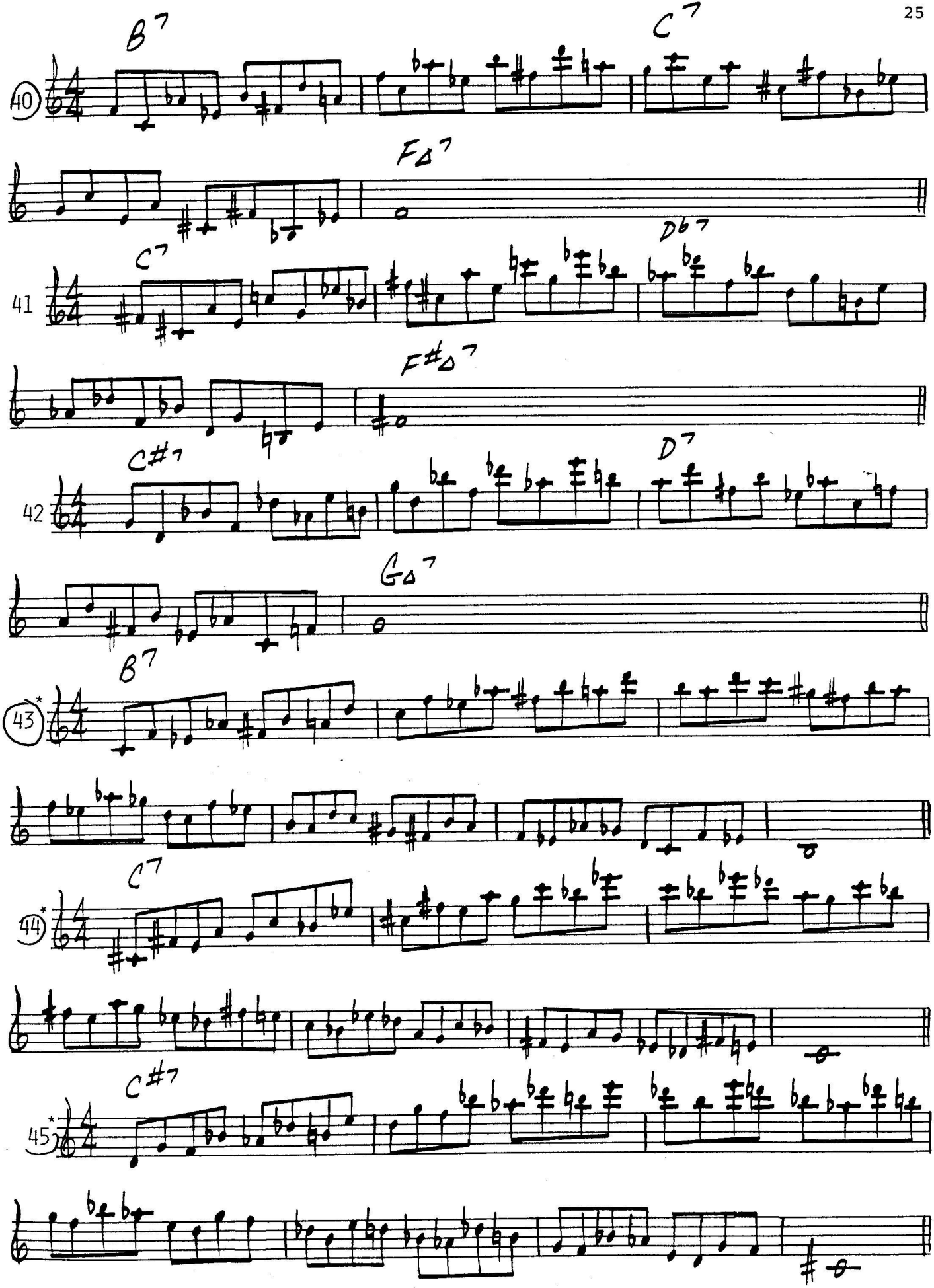

4
5
6
C7sus, C7#9, Cmi7
7
C#7sus, C#7#9, C#mi7
8
D7sus, D7#9, Dmi7
9
Eb7sus, Eb7#9, Ebmi7
10


E7sus, E7#9, Emi7
11
F7sus, F7#9, Fmi7
12
F#7sus, F#7#9, F#mi7
13
G7sus, C7#9, Gmi7
14
A♭7sus, A♭7#9, A♭mi7
15
A7sus, A7#9, Ami7
16
B♭7sus, B♭7#9, B♭mi7
17
B7sus, B7#9, Bmi7
18
C7sus, C7#9, Cmi7
19
C#7sus, C#7#9, C#mi7
20
D7sus, D7#9, Dmi7
21
E♭7sus, E♭7#9, E♭mi7
22

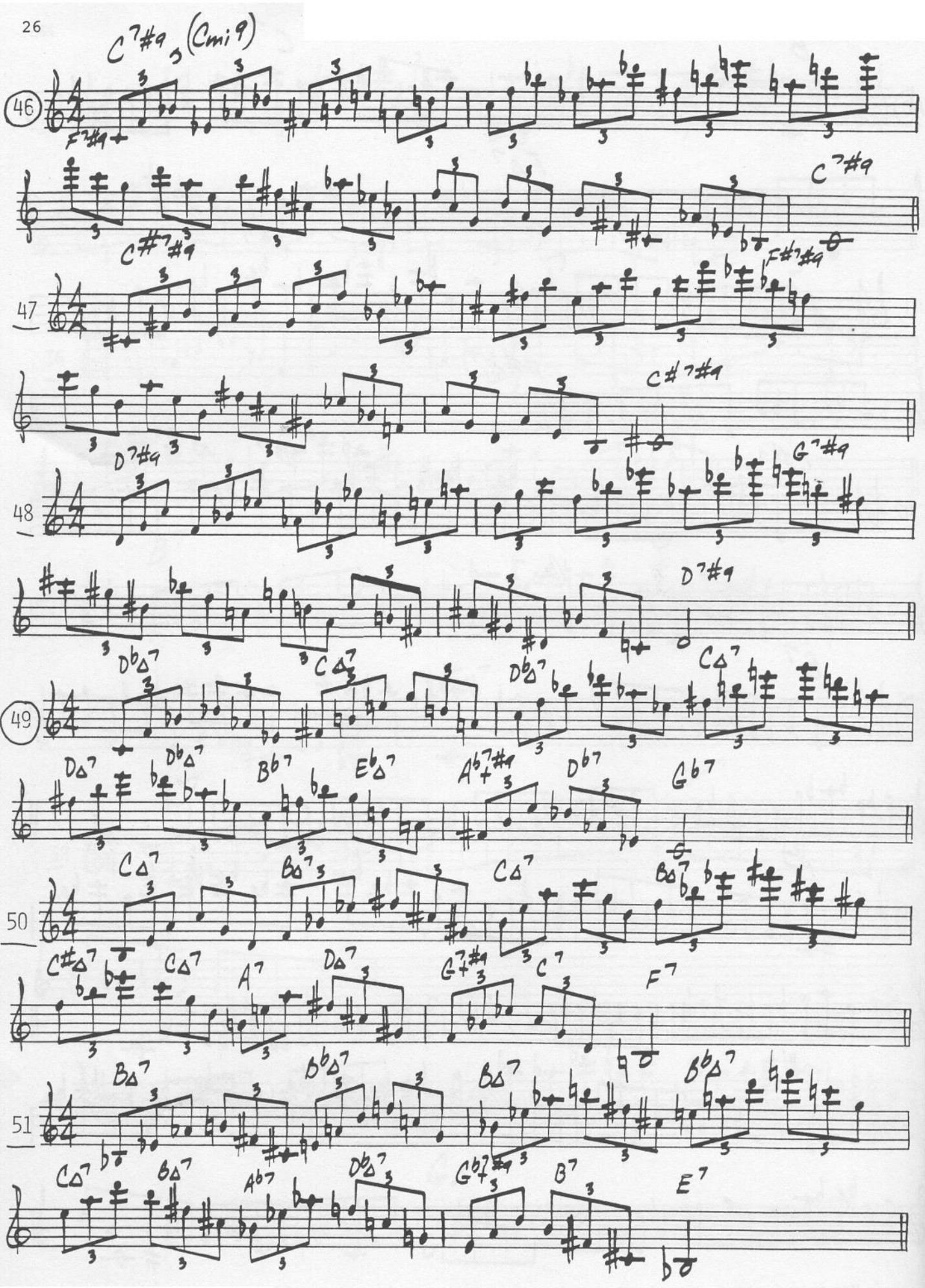

E7sus, E7#9, Emi7
23
F7sus, F7#9, Fmi7
24
F#7sus, F#7#9, F#mi7
25
G7sus, G7#9, Gmi7
26
A♭7sus, A♭7#9, A♭mi7
27
A7sus, A7#9, Ami7
28
B♭7sus, B♭7#9, B♭mi7
29
B7sus, B7#9, Bmi7
30
31

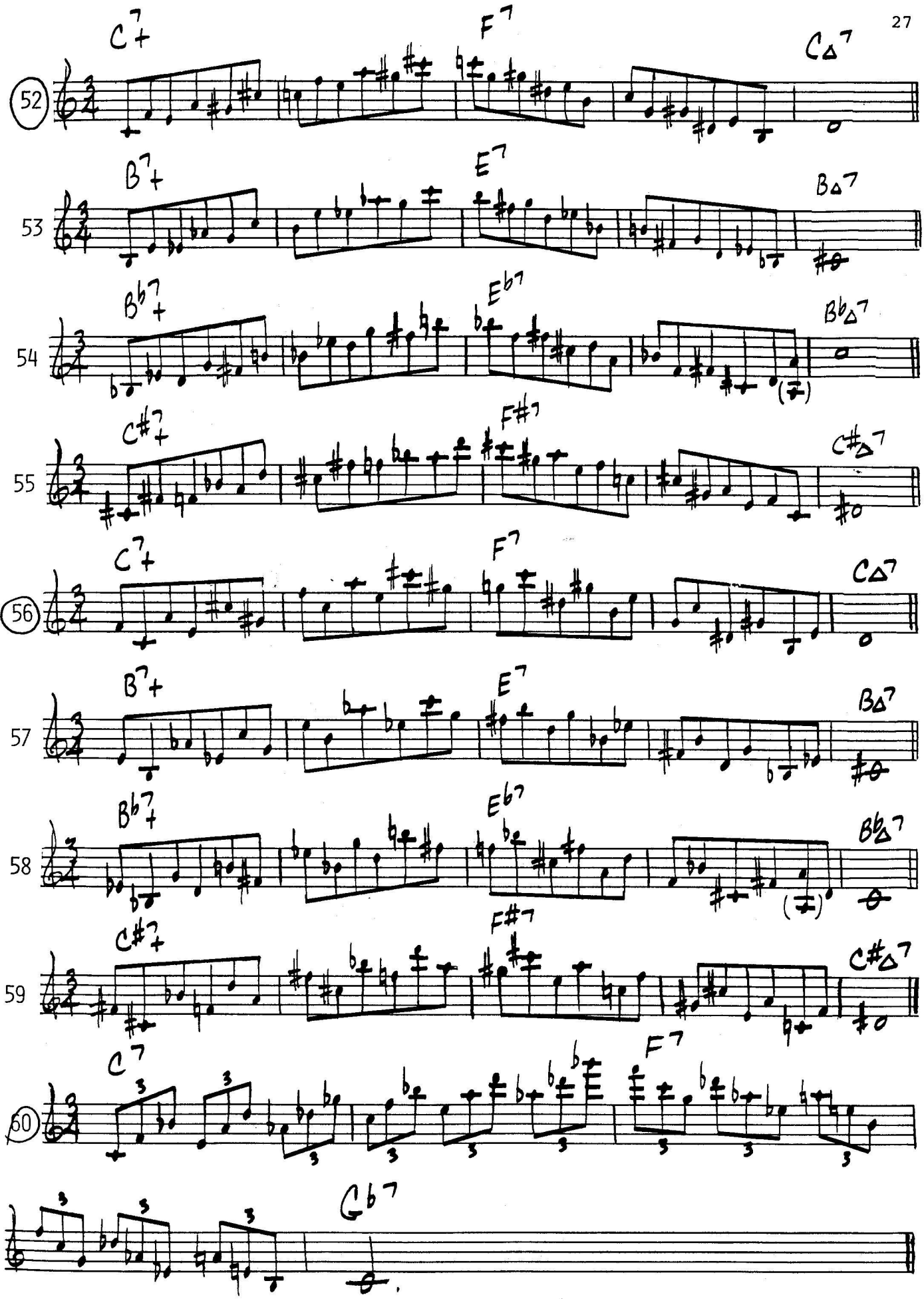

32
33
34

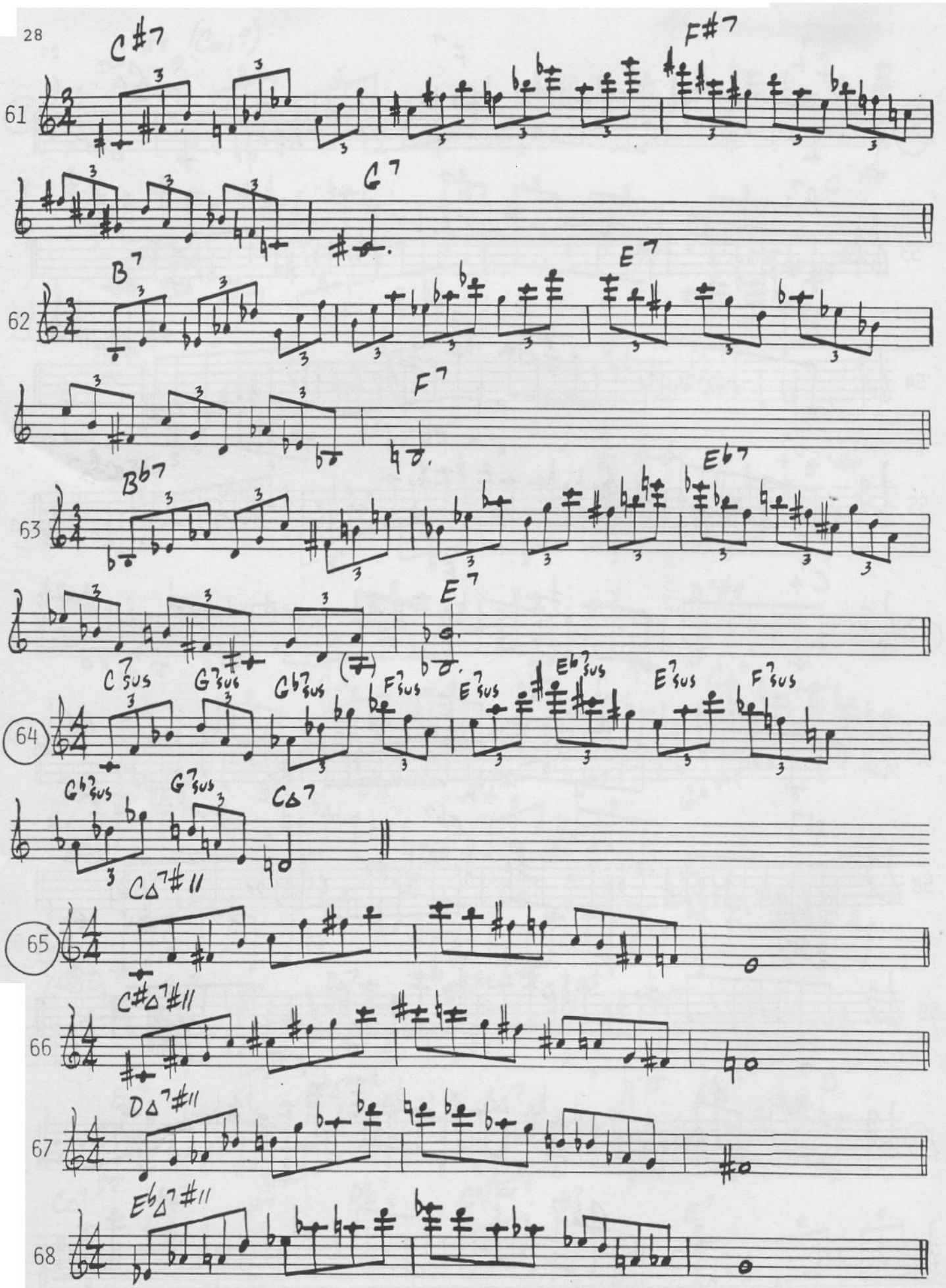

35
36
B7
C7
37
F△7
C7
D♭7
38
F#△7
C#7
D7
39
G△7

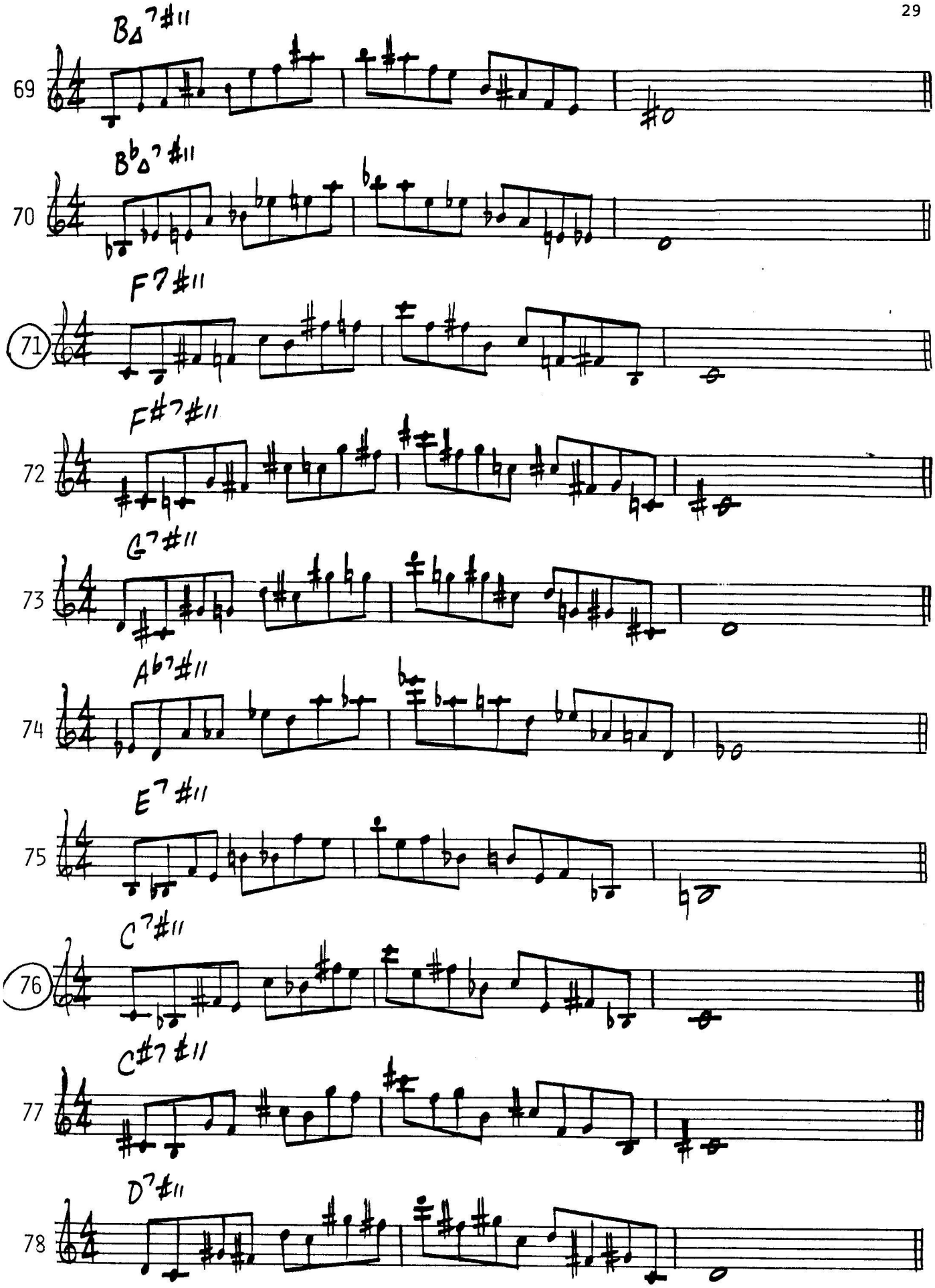


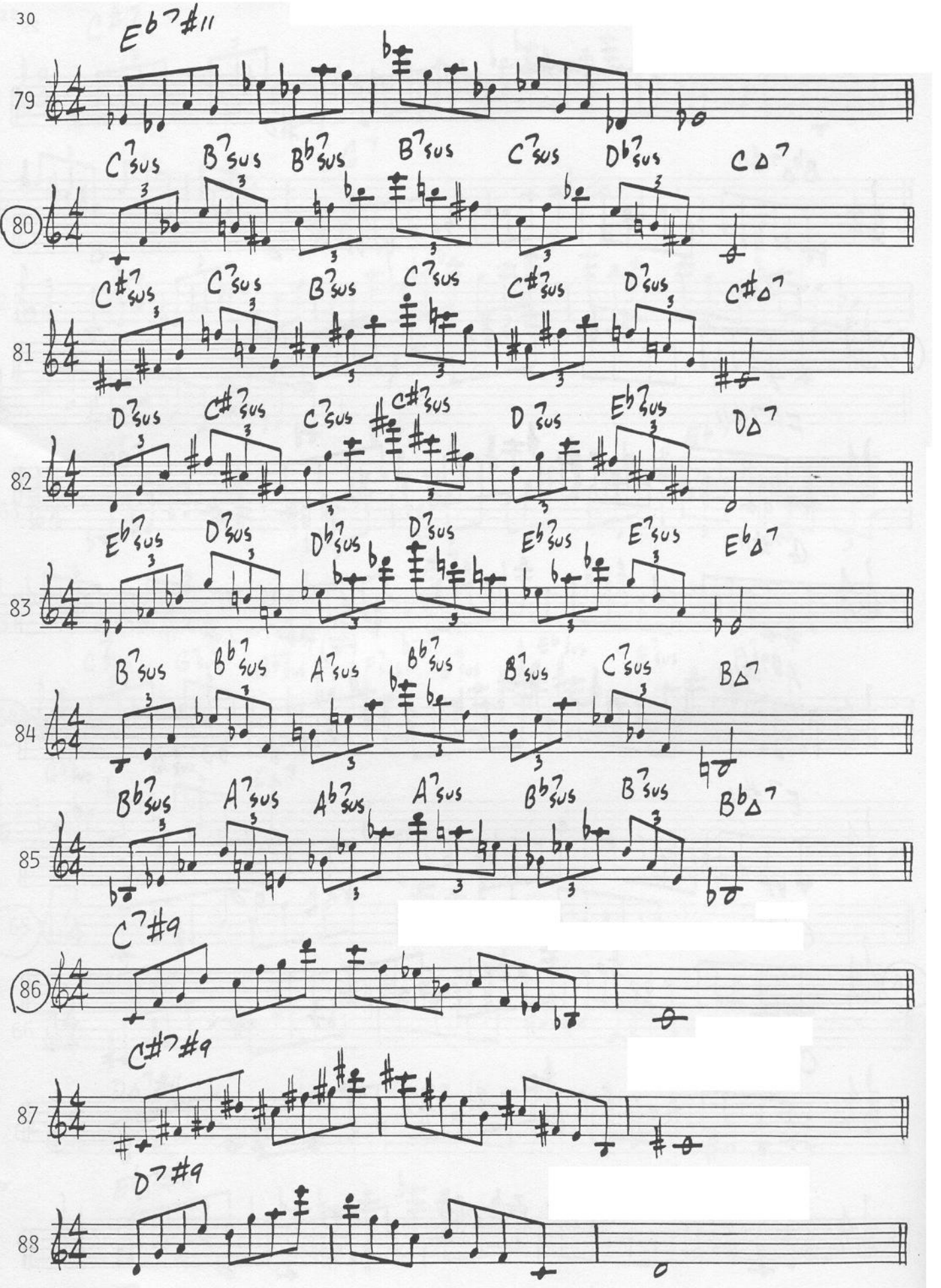
* Use this pattern over chords in the same manner as you use the Diminished Scale.

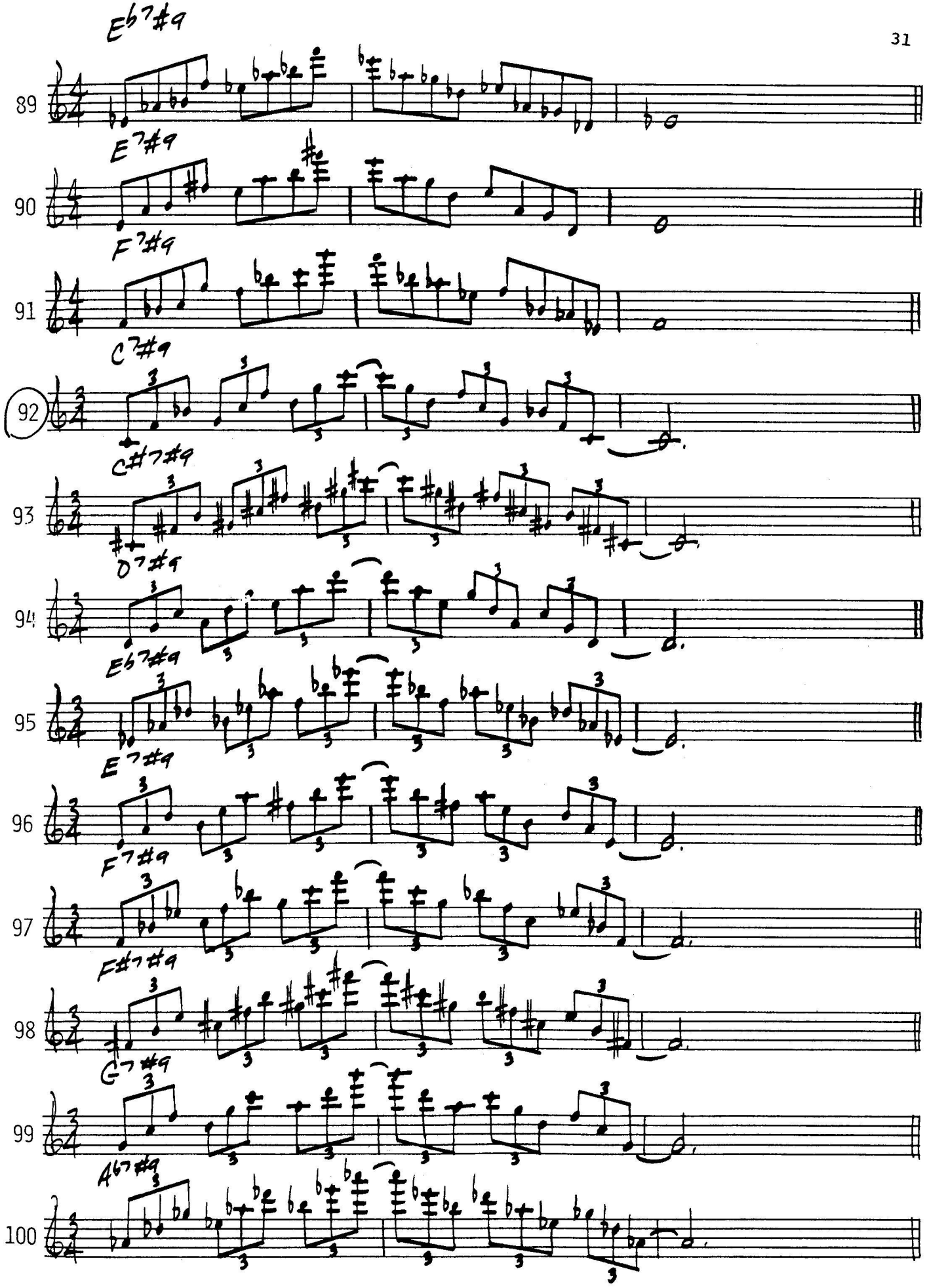

C7#9 (Cmi9)
46
47
48
49
50
51

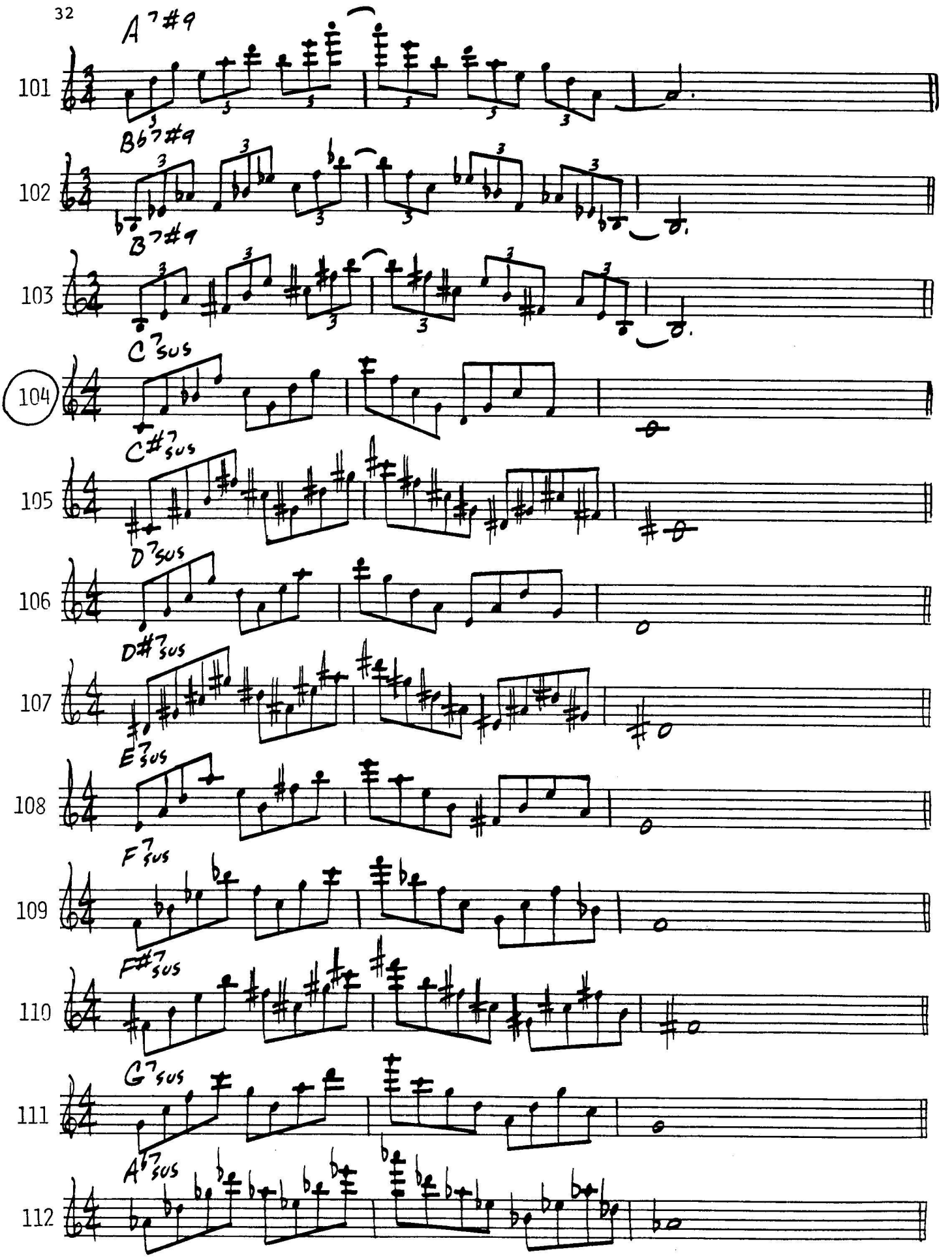

52
C7+
F7
CΔ7
53
B7+
E7
BΔ7
54
B♭7+
E♭7
B♭Δ7
55
C#7+
F#7
C#Δ7
56
C7+
F7
CΔ7
57
B7+
E7
BΔ7
58
B♭7+
E♭7
B♭Δ7
59
C#7+
F#7
C#Δ7
60
C7
F7
G♭7

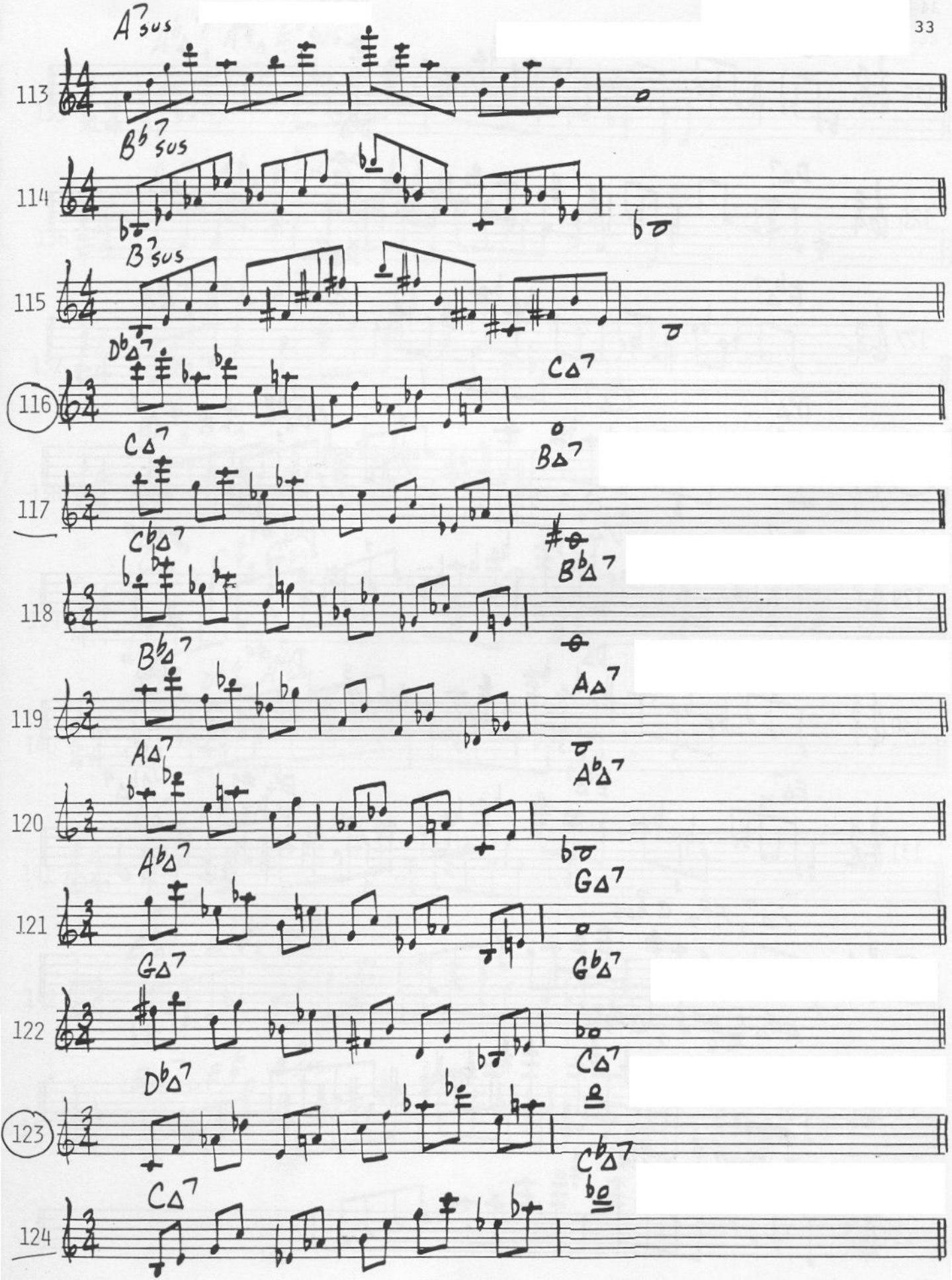

C#7
F#7
61
G7
B7
E7
62
F7
B♭7
E♭7
63
E7
C7sus
G7sus
G♭7sus
F7sus
E7sus
E♭7sus
E7sus
F7sus
64
G♭7sus
G7sus
C△7
C△7#11
65
C#△7#11
66
D△7#11
67
E♭△7#11
68

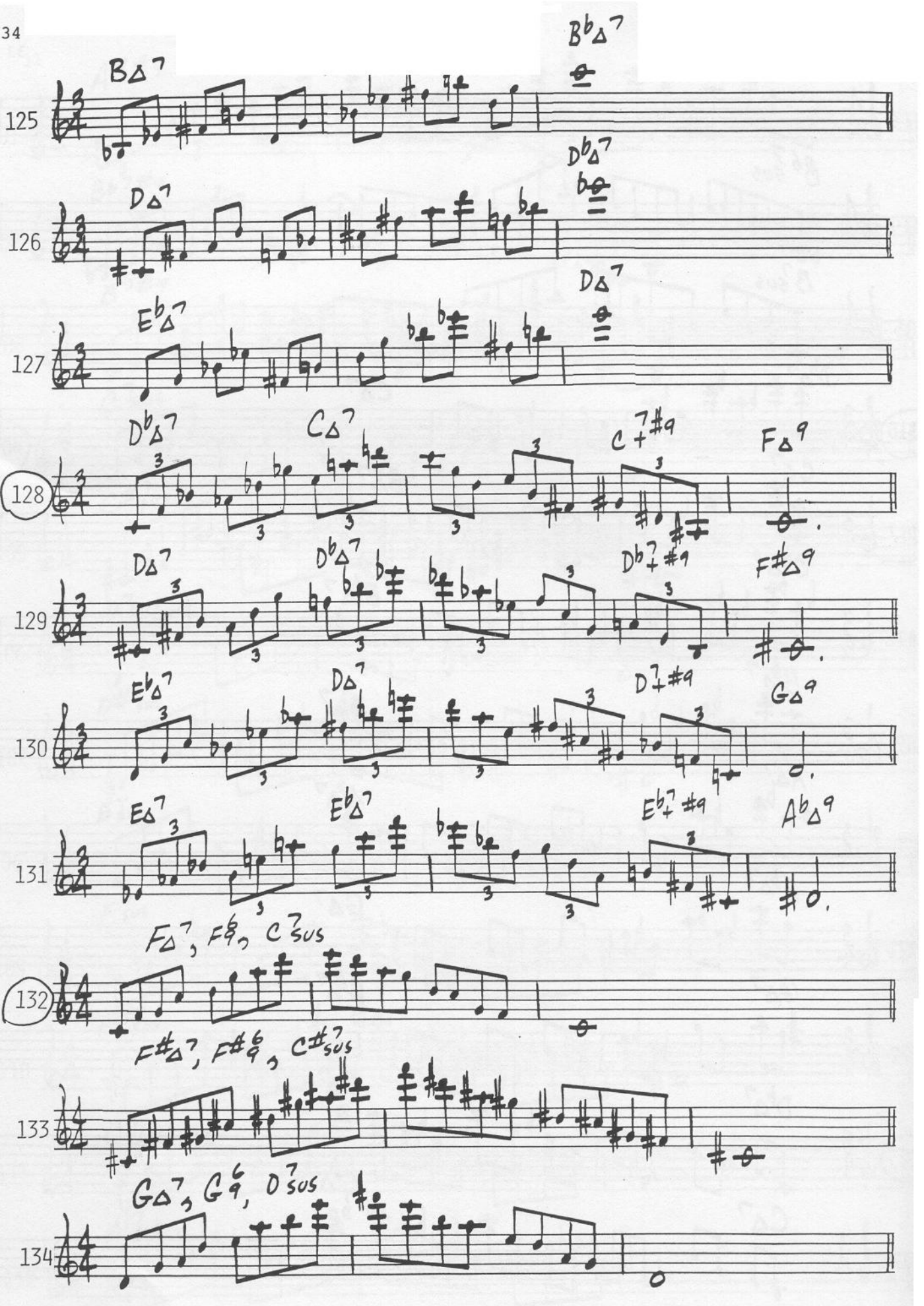

B△7#11
69
B♭△7#11
70
F7#11
71
F#7#11
72
G7#11
73
A♭7#11
74
E7#11
75
C7#11
76
C#7#11
77
D7#11
78

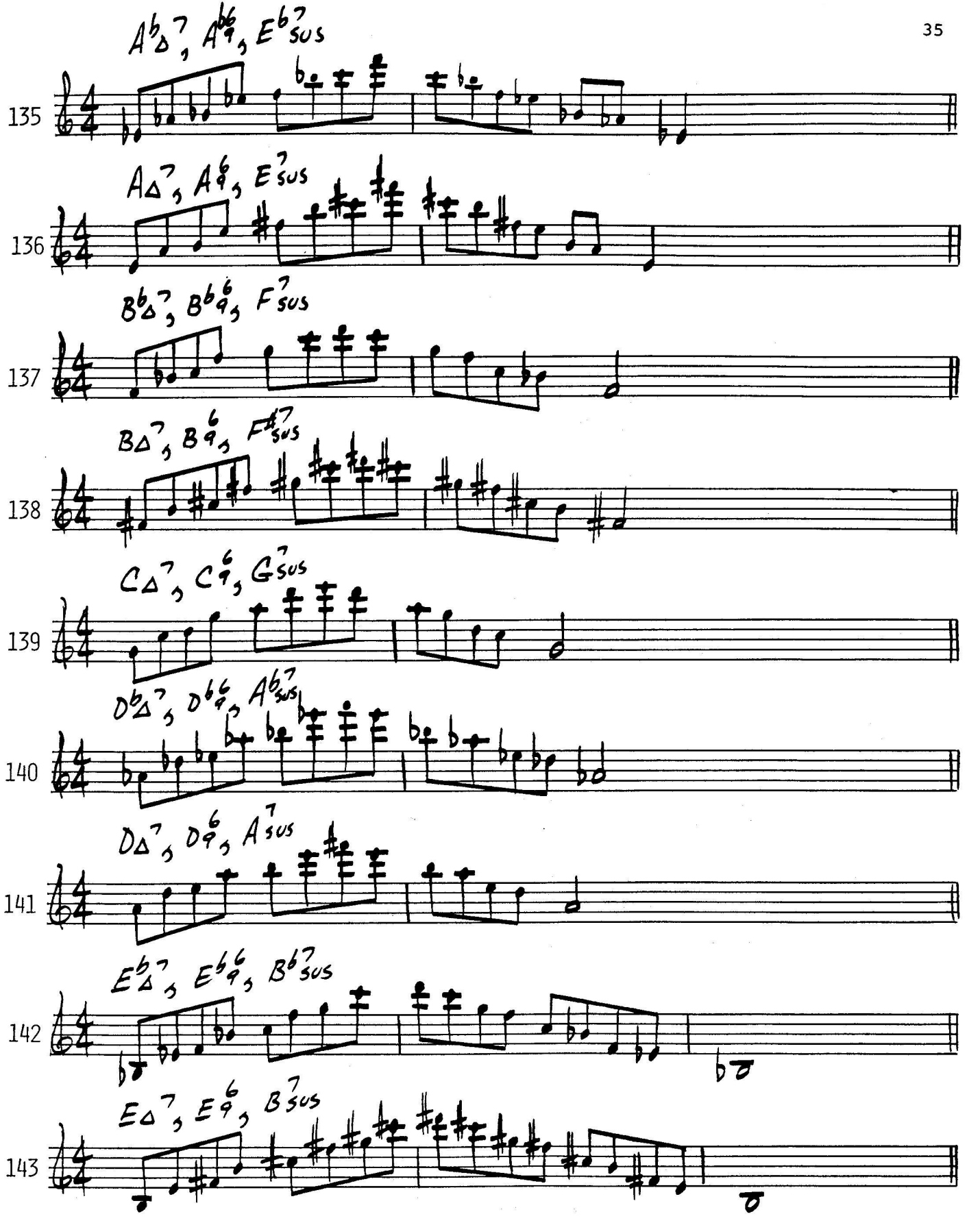

79
E♭7♯11
80
C7sus B7sus B♭7sus B7sus C7sus D♭7sus C△7
81
C♯7sus C7sus B7sus C7sus C♯7sus D7sus C♯△7
82
D7sus C♯7sus C7sus C♯7sus D7sus E♭7sus D△7
83
E♭7sus D7sus D♭7sus D7sus E♭7sus E7sus E♭△7
84
B7sus B♭7sus A7sus B♭7sus B7sus C7sus B△7
85
B♭7sus A7sus A♭7sus A7sus B♭7sus B7sus B♭△7
86
C7♯9
87
C♯7♯9
88
D7♯9


89
E♭7#9
90
E7#9
91
F7#9
92
C7#9
93
C#7#9
94
D7#9
95
E♭7#9
96
E7#9
97
F7#9
98
F#7#9
99
G7#9
100
A♭7#9


A7#9
101
Bb7#9
102
B7#9
103
C7sus
104
C#7sus
105
D7sus
106
D#7sus
107
E7sus
108
F7sus
109
F#7sus
110
G7sus
111
Ab7sus
112


113
A7sus
114
B♭7sus
115
B7sus
D♭Δ7
116
CΔ7
CΔ7
BΔ7
117
C♭Δ7
B♭Δ7
118
B♭Δ7
119
AΔ7
AΔ7
A♭Δ7
120
A♭Δ7
121
GΔ7
GΔ7
G♭Δ7
122
D♭Δ7
CΔ7
123
CΔ7
C♭Δ7
124


125
B△7
B♭△7
126
D△7
D♭△7
127
E♭△7
D△7
128
D♭△7
C△7
C+7♯9
F△9
129
D△7
D♭△7
D♭+7♯9
F♯△9
130
E♭△7
D△7
D+7♯9
G△9
131
E△7
E♭△7
E♭+7♯9
A♭△9
132
F△7, F6/9, C7sus
133
F♯△7, F♯6/9, C♯7sus
134
G△7, G6/9, D7sus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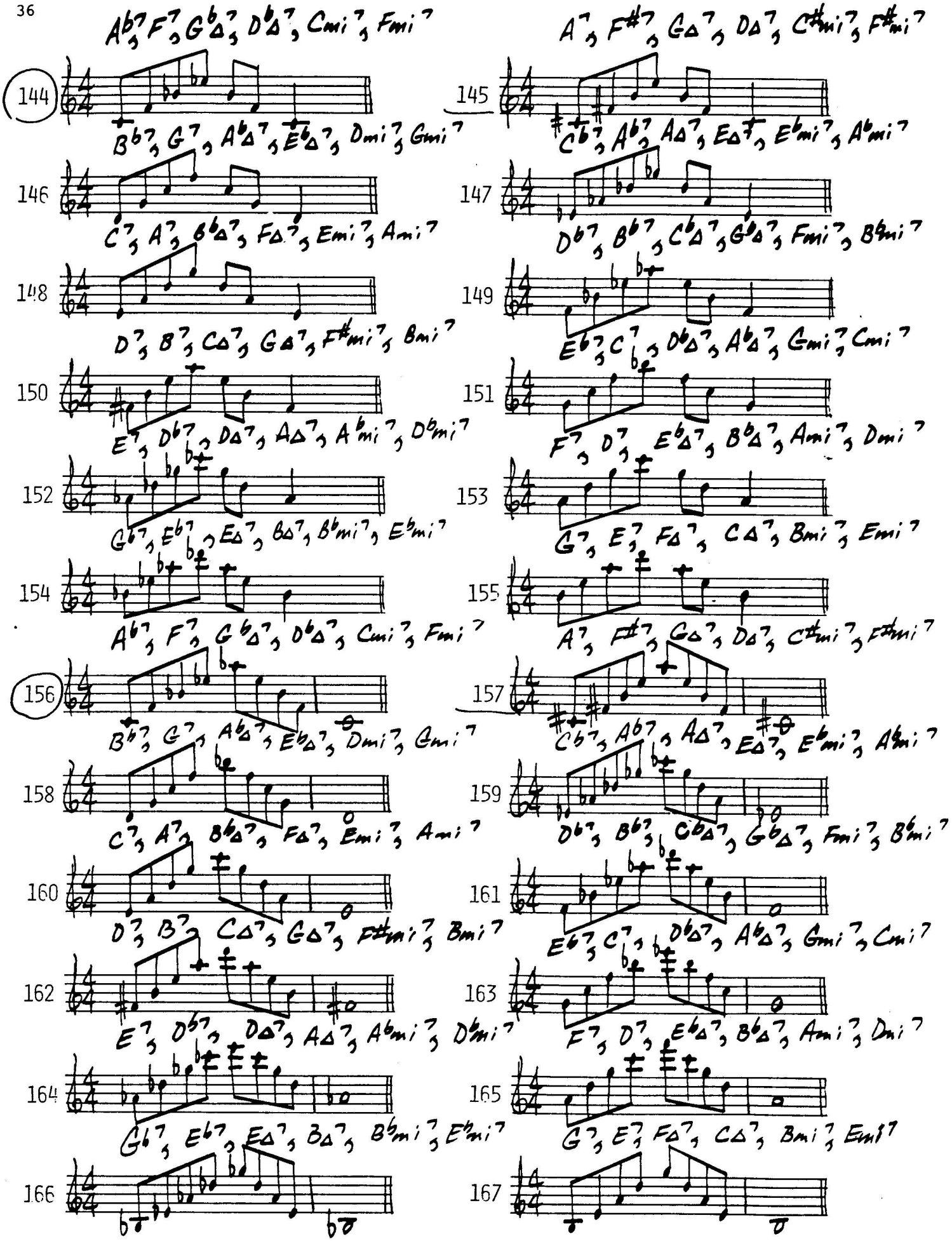
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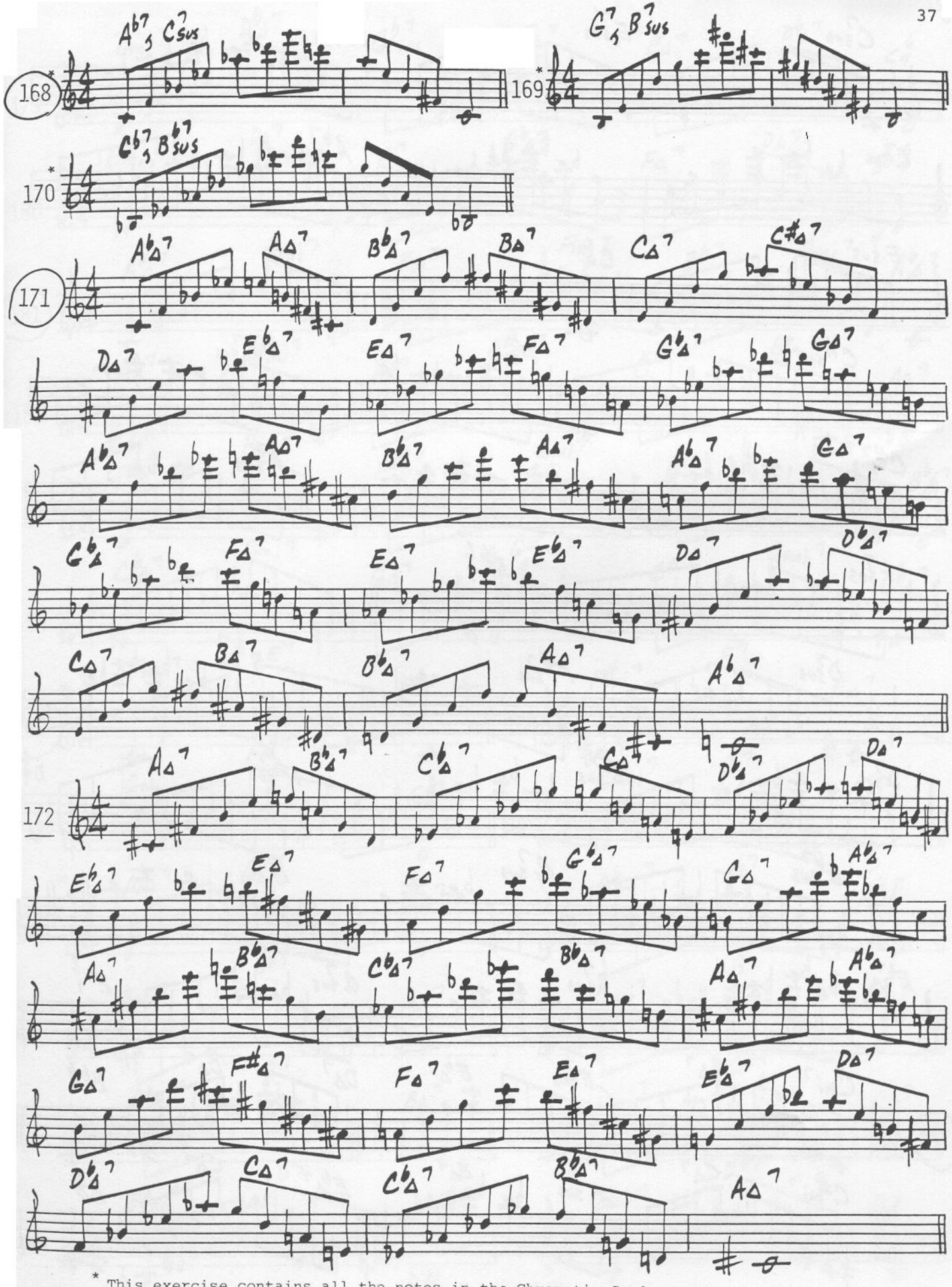
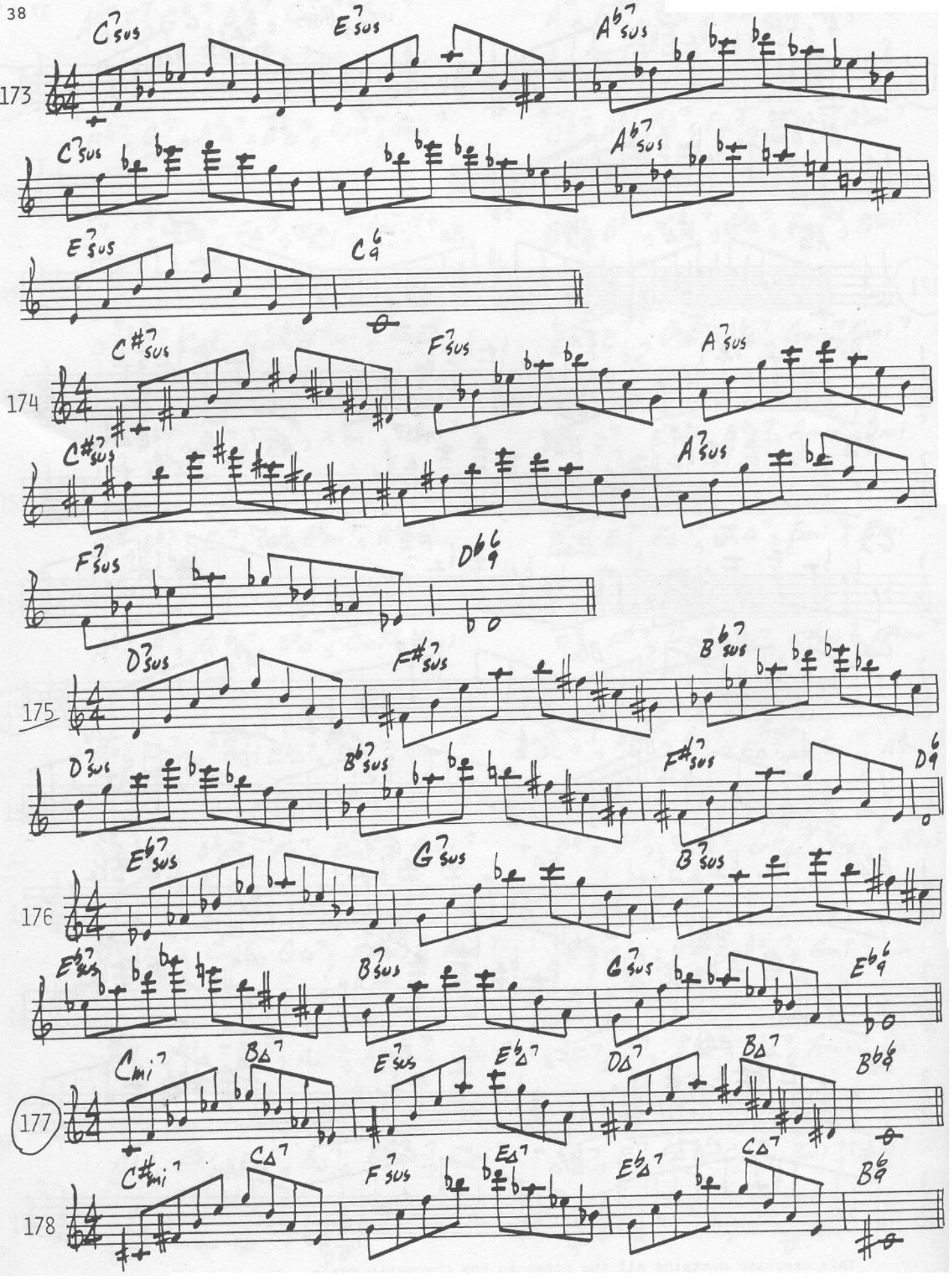
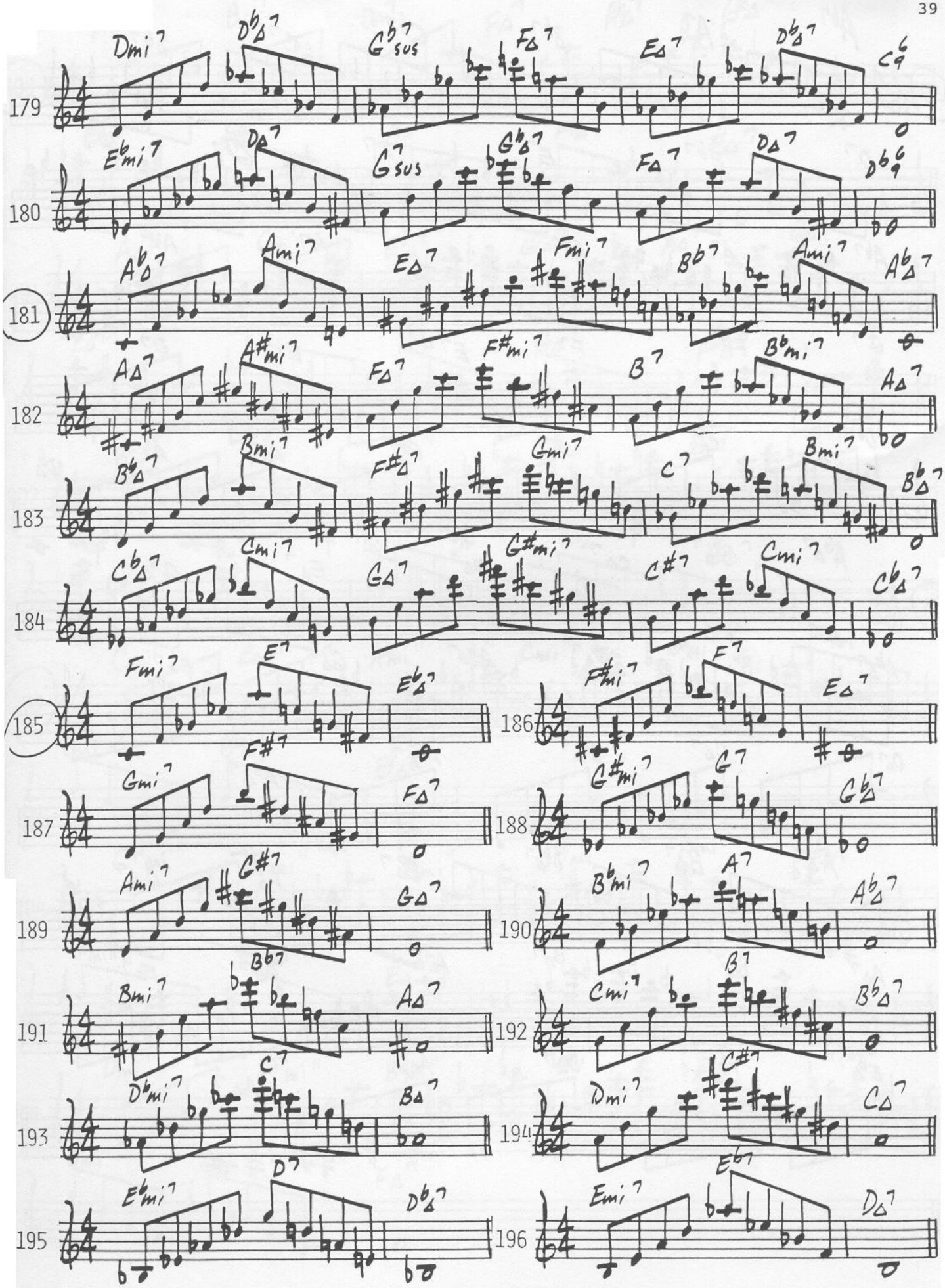
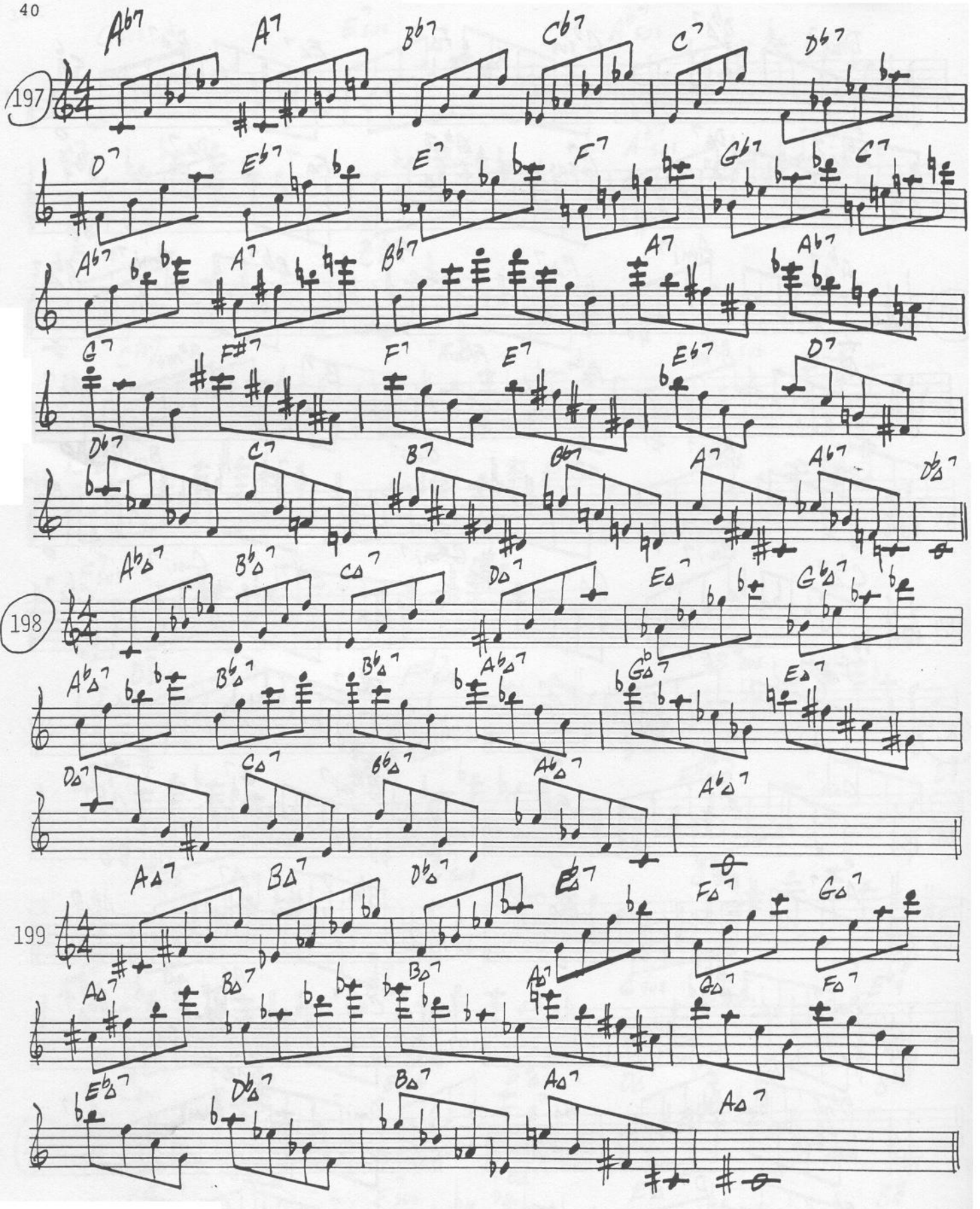


* This exercise contains all the notes in the Chromatic Scale. It will work effectively over any chord as long as you begin on a chord tone, i.e., $A^{\flat 7}$, $C^{7}sus$, etc.


173
C7sus
E7sus
Ab7sus
C7sus
Ab7sus
E7sus
C6/9
174
C#7sus
F7sus
A7sus
C#7sus
A7sus
F7sus
Db6/9
175
D7sus
F#7sus
Bb7sus
D7sus
Bb7sus
F#7sus
D6/9
176
Eb7sus
G7sus
B7sus
Eb7sus
B7sus
G7sus
Eb6/9
177
Cmi7
BΔ7
E7sus
EbΔ7
DΔ7
BΔ7
Bb6/9
178
C#mi7
CΔ7
F7sus
EΔ7
EbΔ7
CΔ7
B6/9


179
Dmi7 Db△7 Gb7sus F△7 E△7 Db△7 C6/9
180
Ebmi7 D△7 G7sus Gb△7 F△7 D△7 Db6/9
181
Ab△7 Ami7 E△7 Fmi7 Bb7 Ami7 Ab△7
182
A△7 A#mi7 F△7 F#mi7 B7 Bbmi7 A△7
183
Bb△7 Bmi7 F#△7 Gmi7 C7 Bmi7 Bb△7
184
Cb△7 Cmi7 G△7 G#mi7 C#7 Cmi7 Cb△7
185
Fmi7 E7 Eb△7
186
F#mi7 F7 E△7
187
Gmi7 F#7 F△7
188
G#mi7 G7 Gb△7
189
Ami7 C#7 G△7 Bb7
190
Bbmi7 A7 Ab△7 B7
191
Bmi7 A△7 C7
192
Cmi7 B△7 C#7
193
Dbmi7 Bb△7 D7
194
Dmi7 C△7 Eb7
195
Ebmi7 Db△7
196
Emi7 D△7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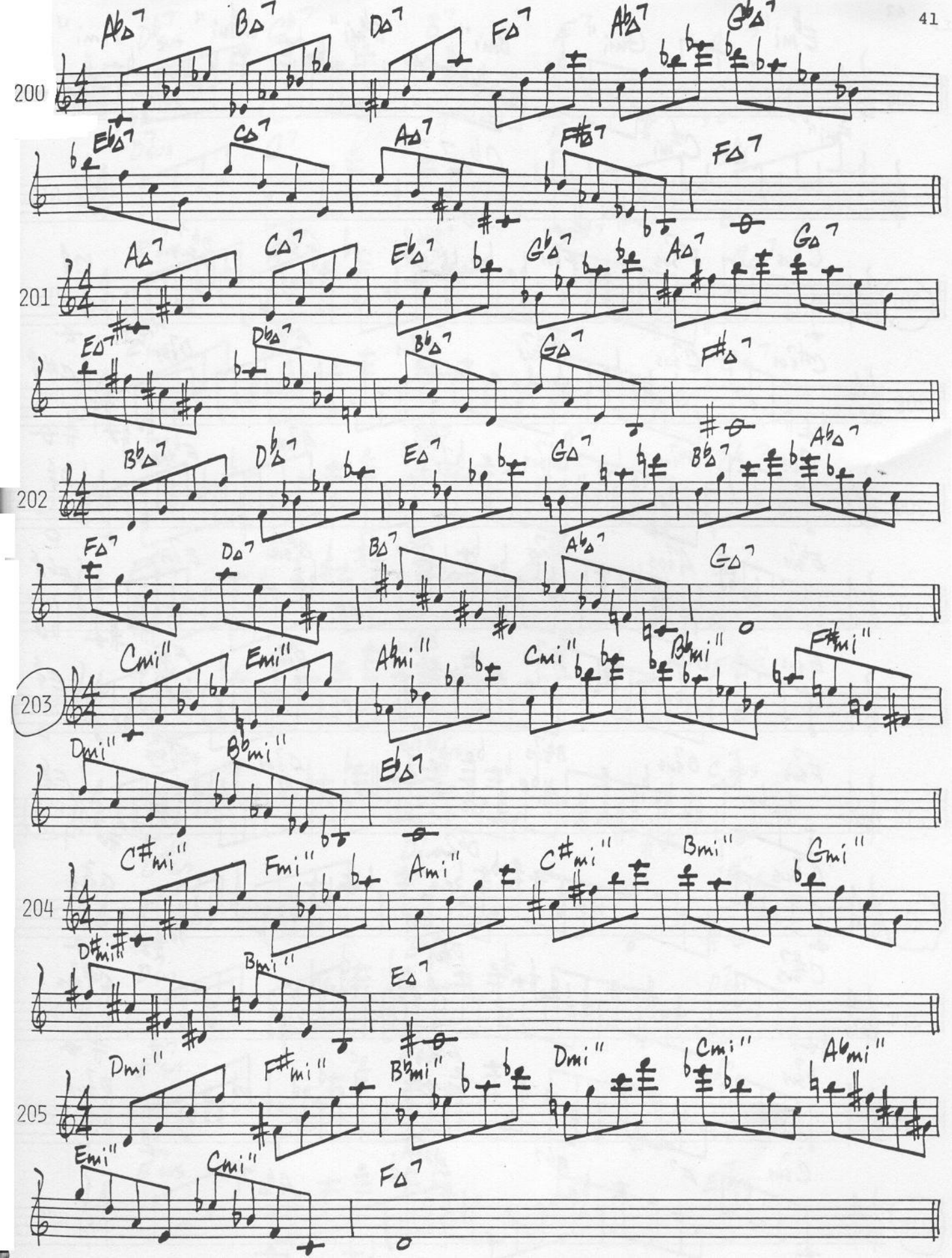
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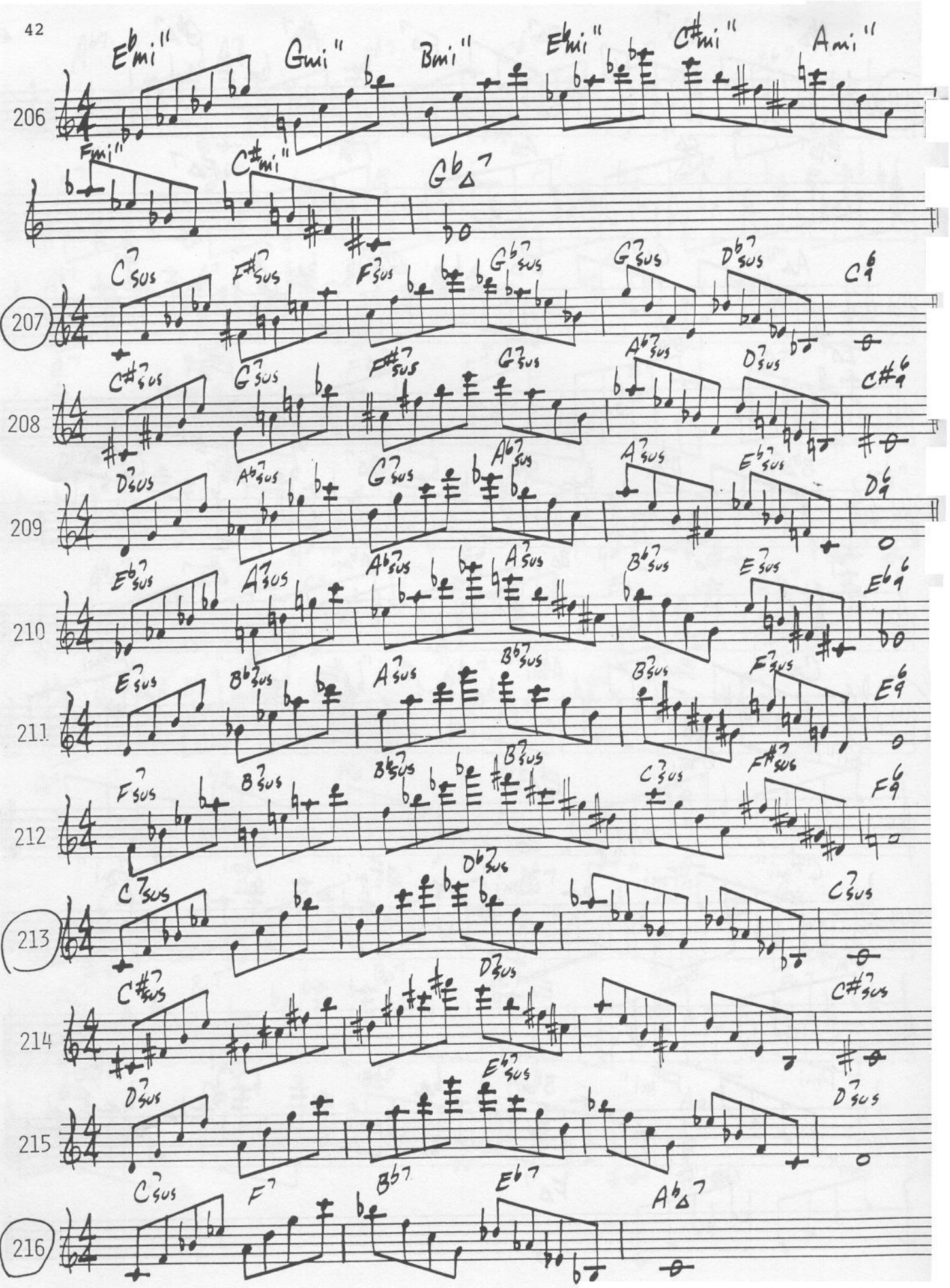
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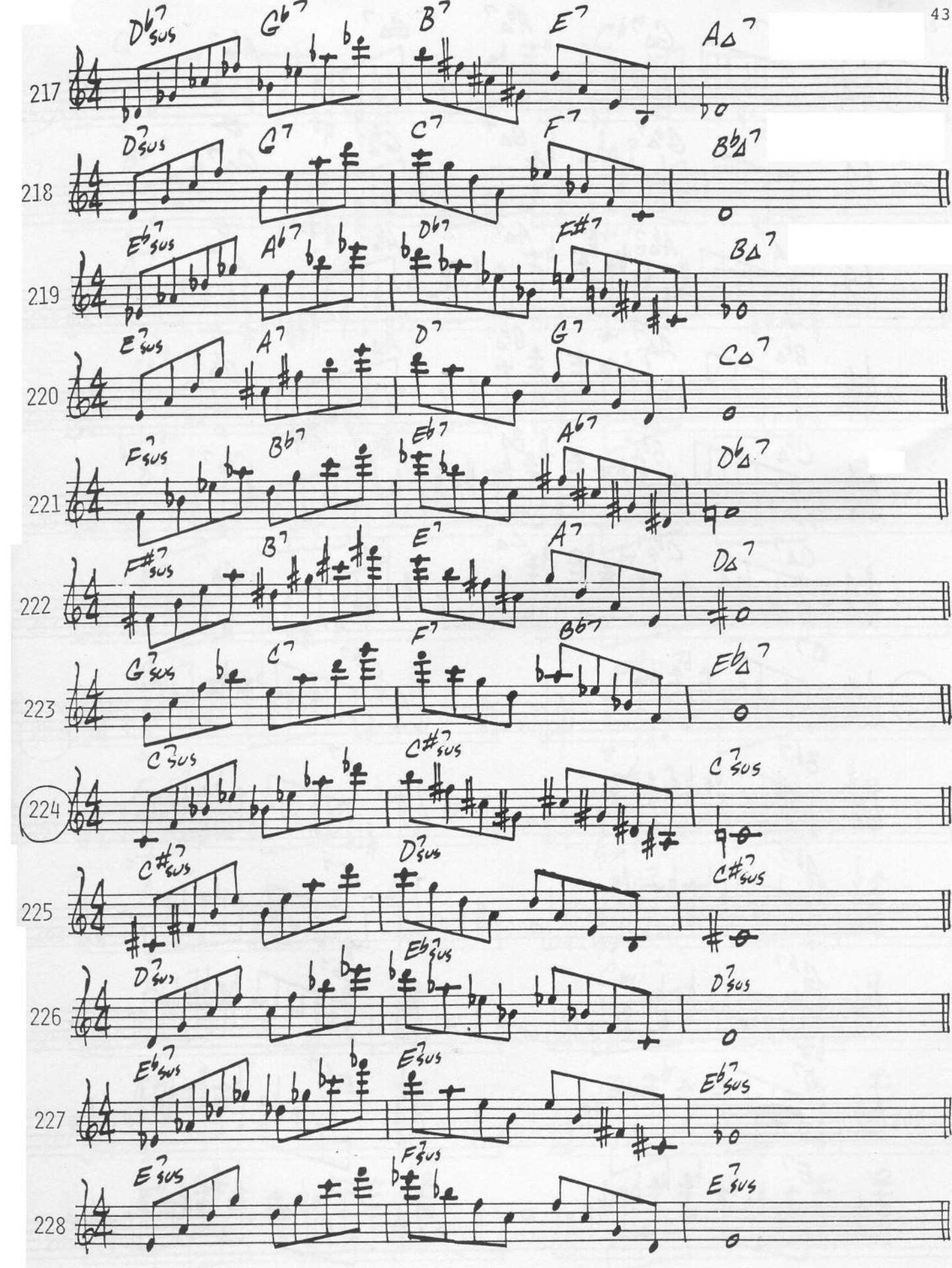
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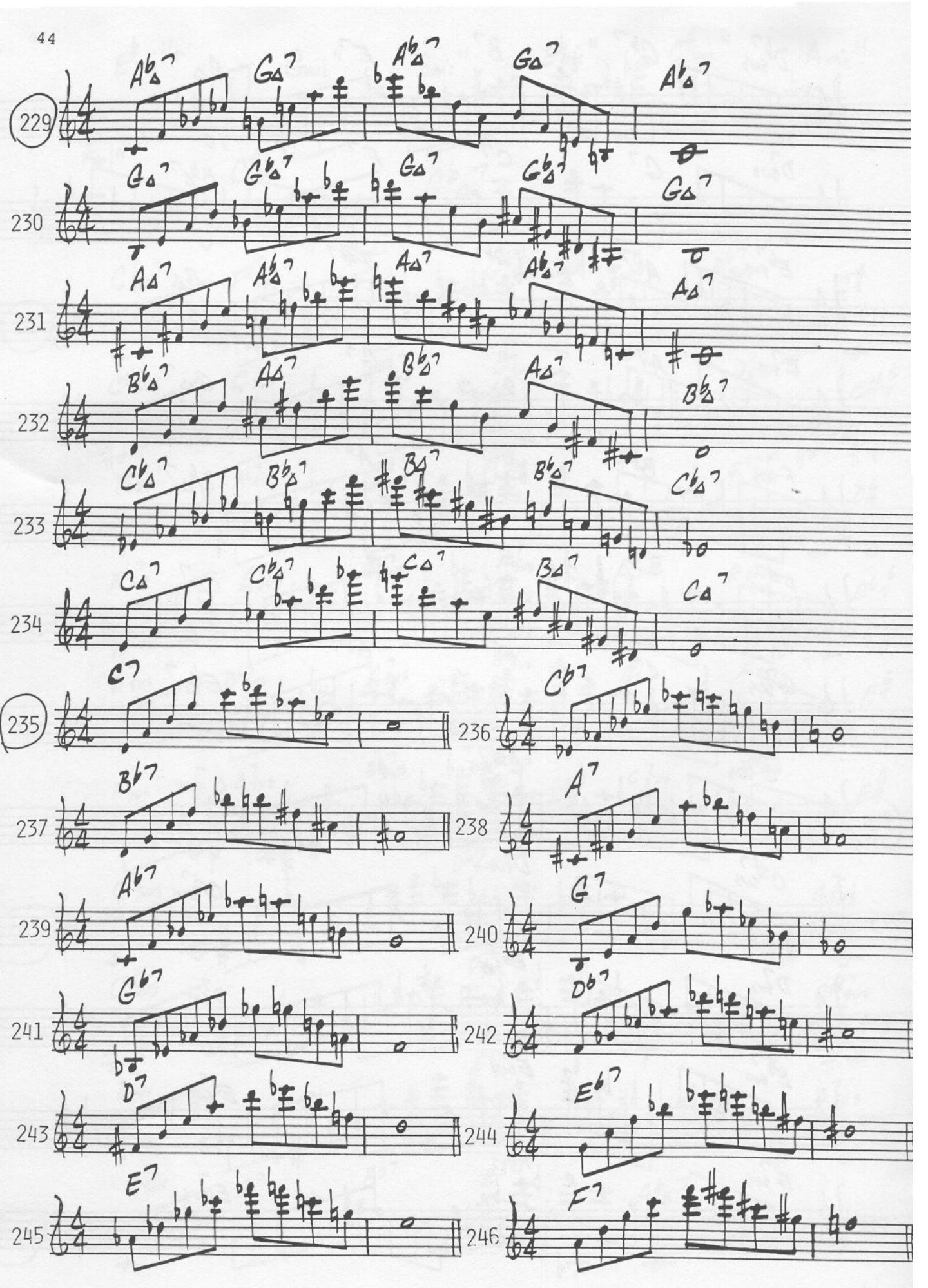
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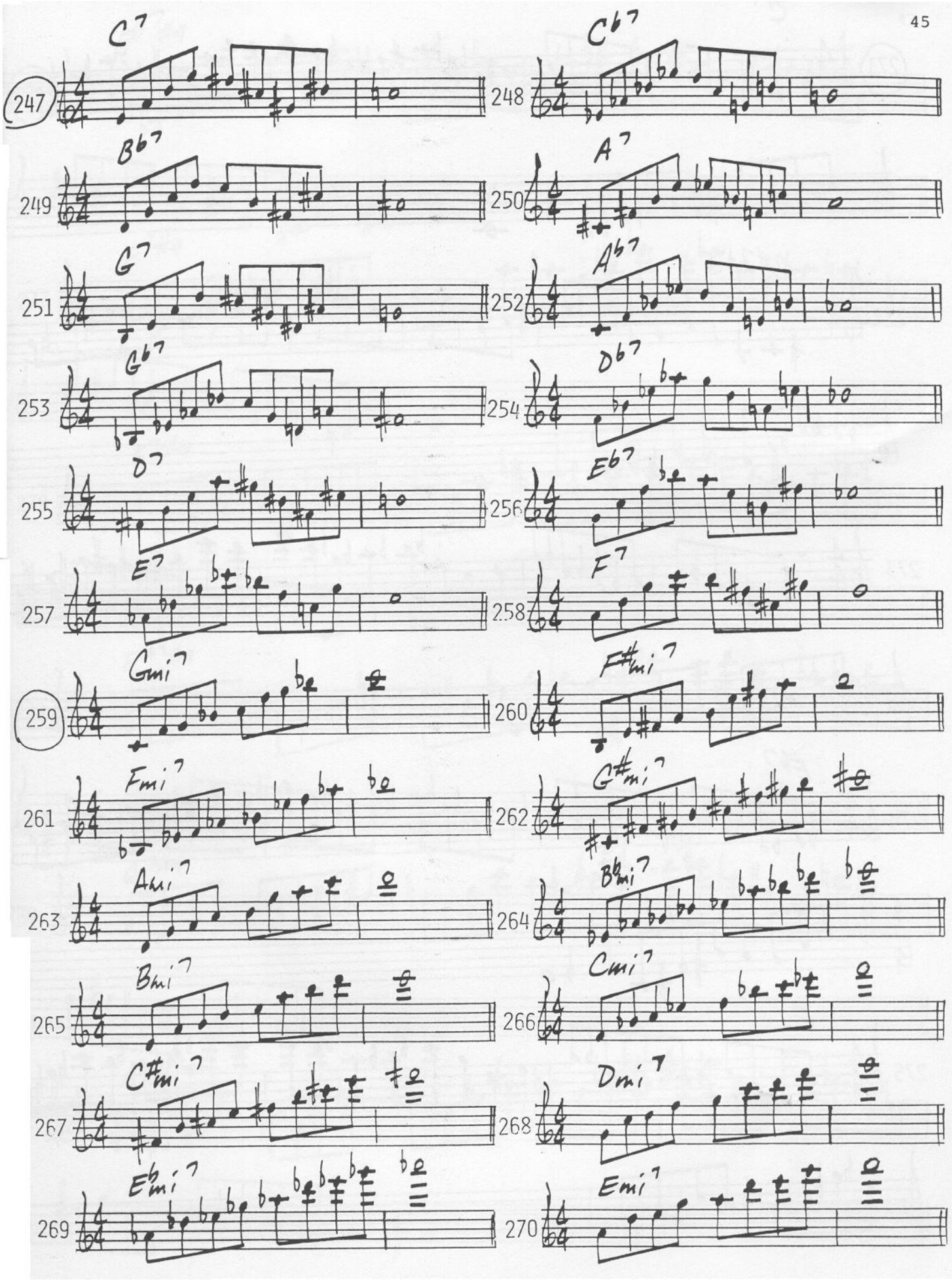
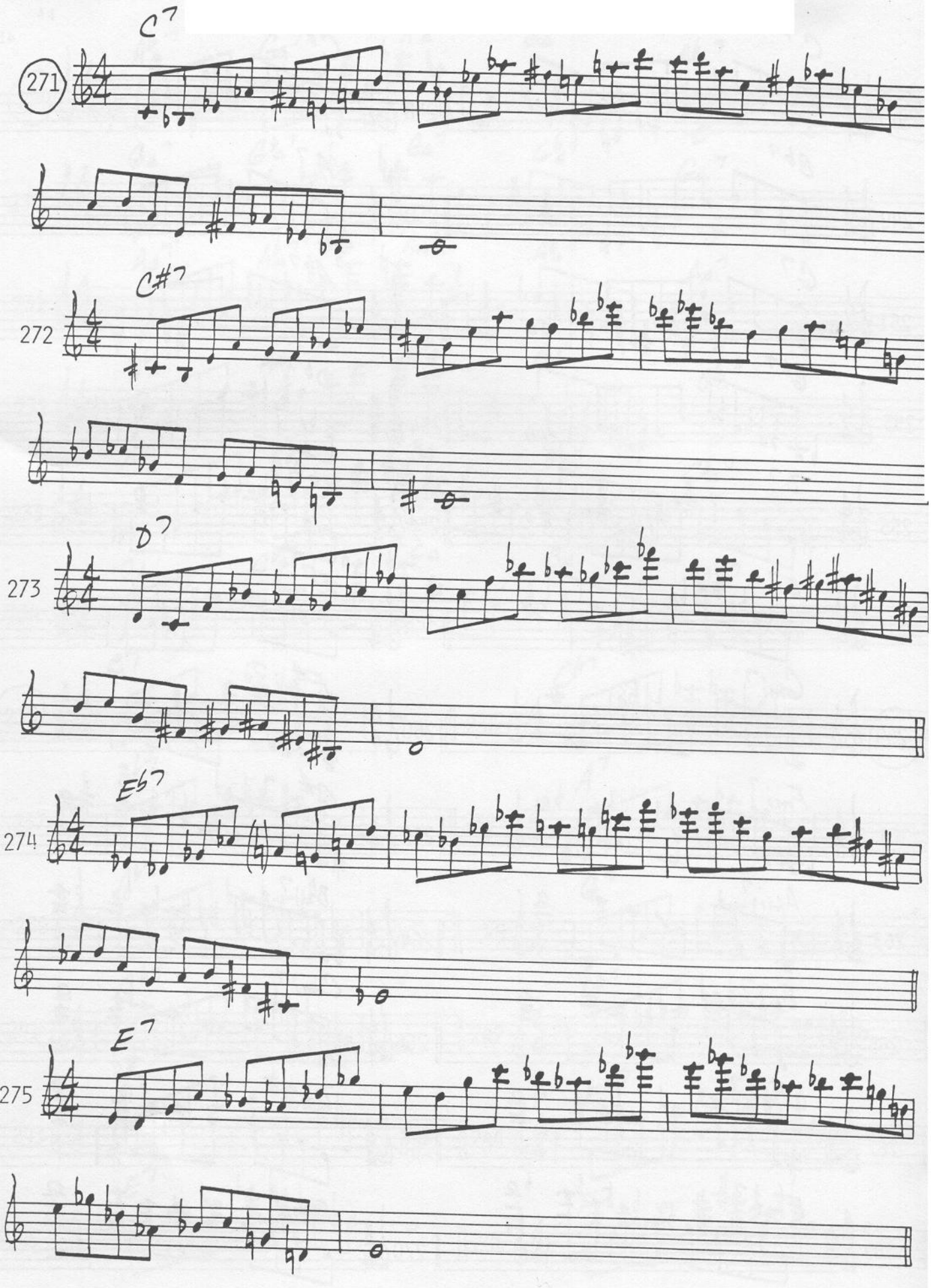
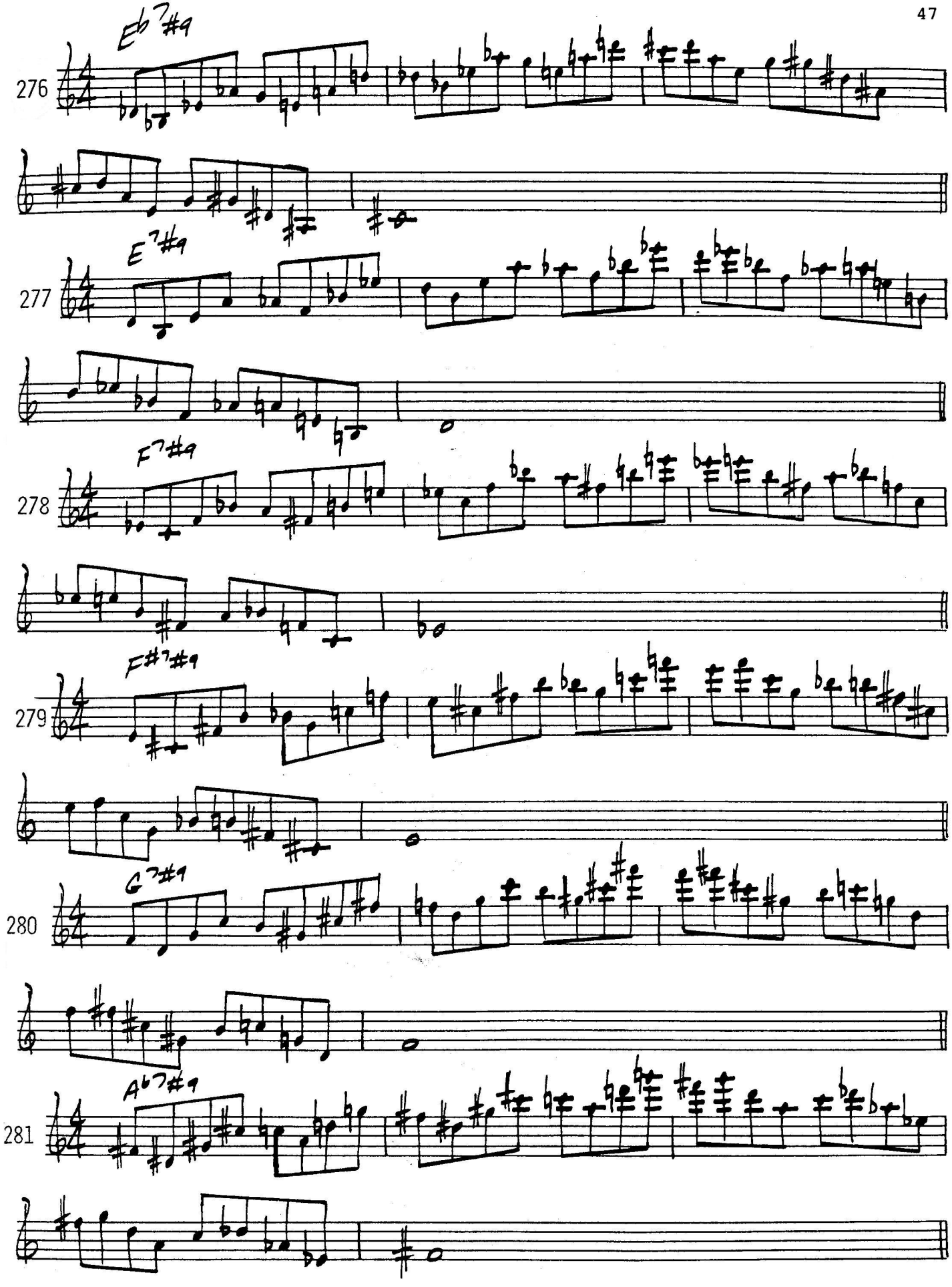
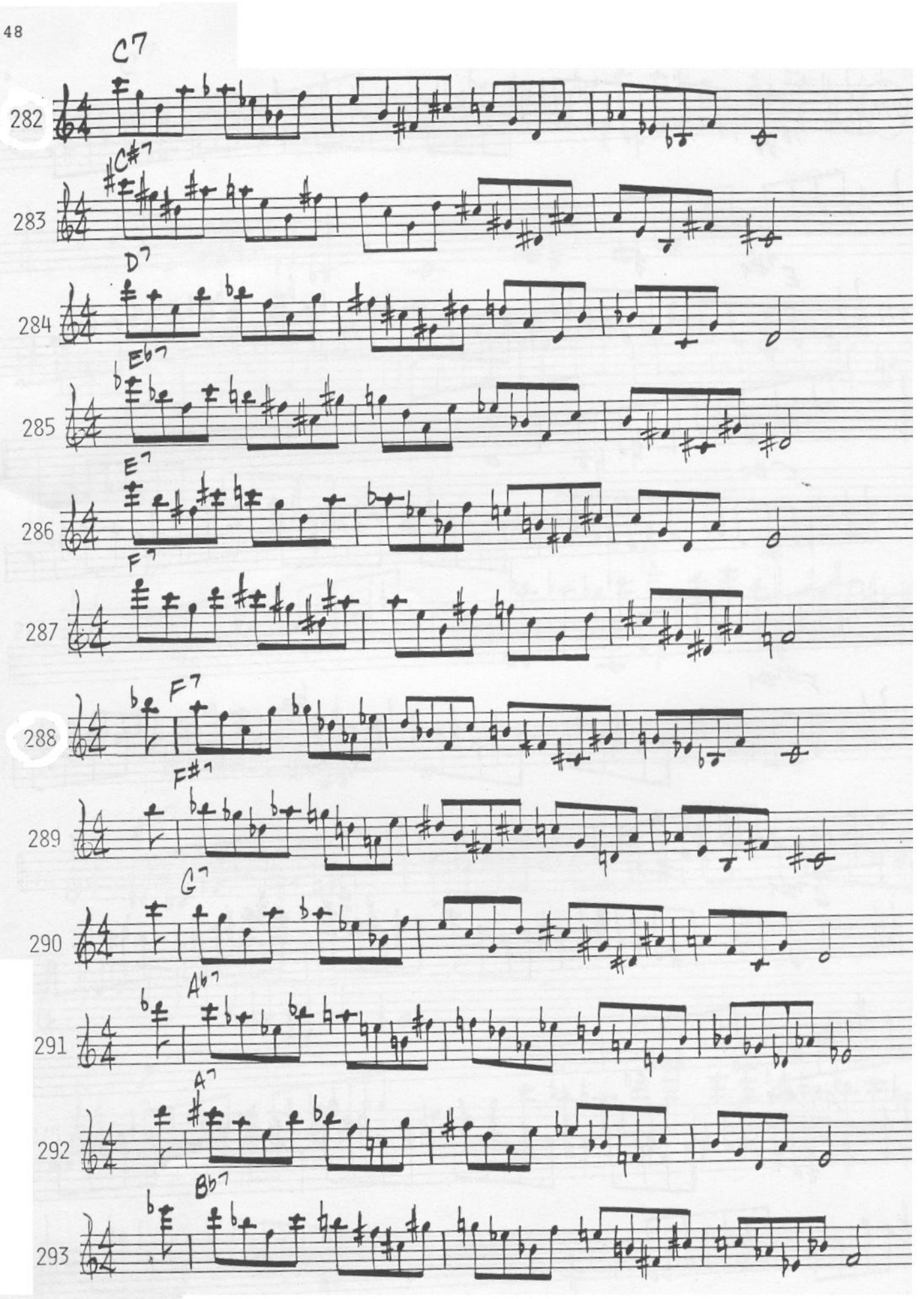
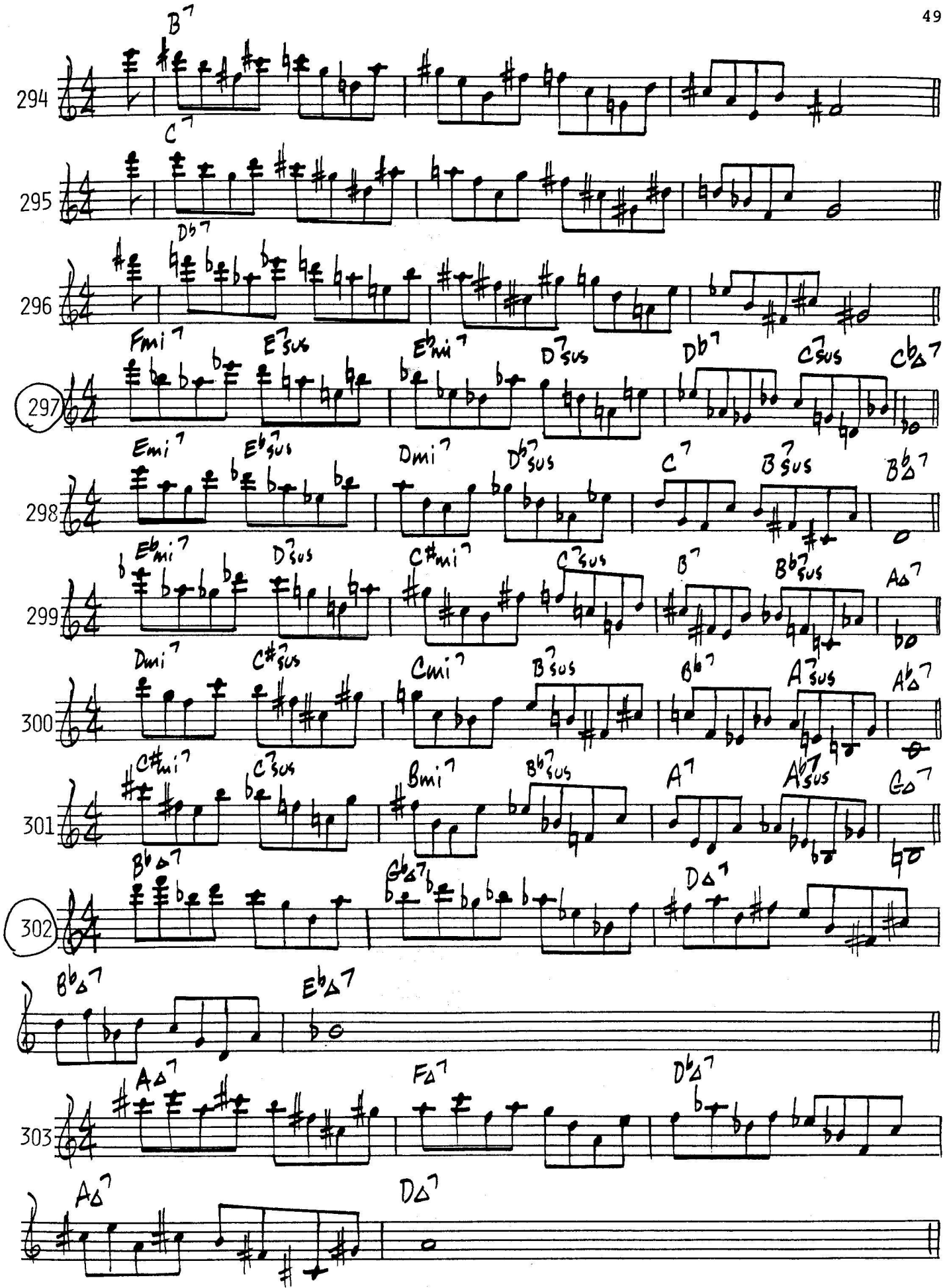
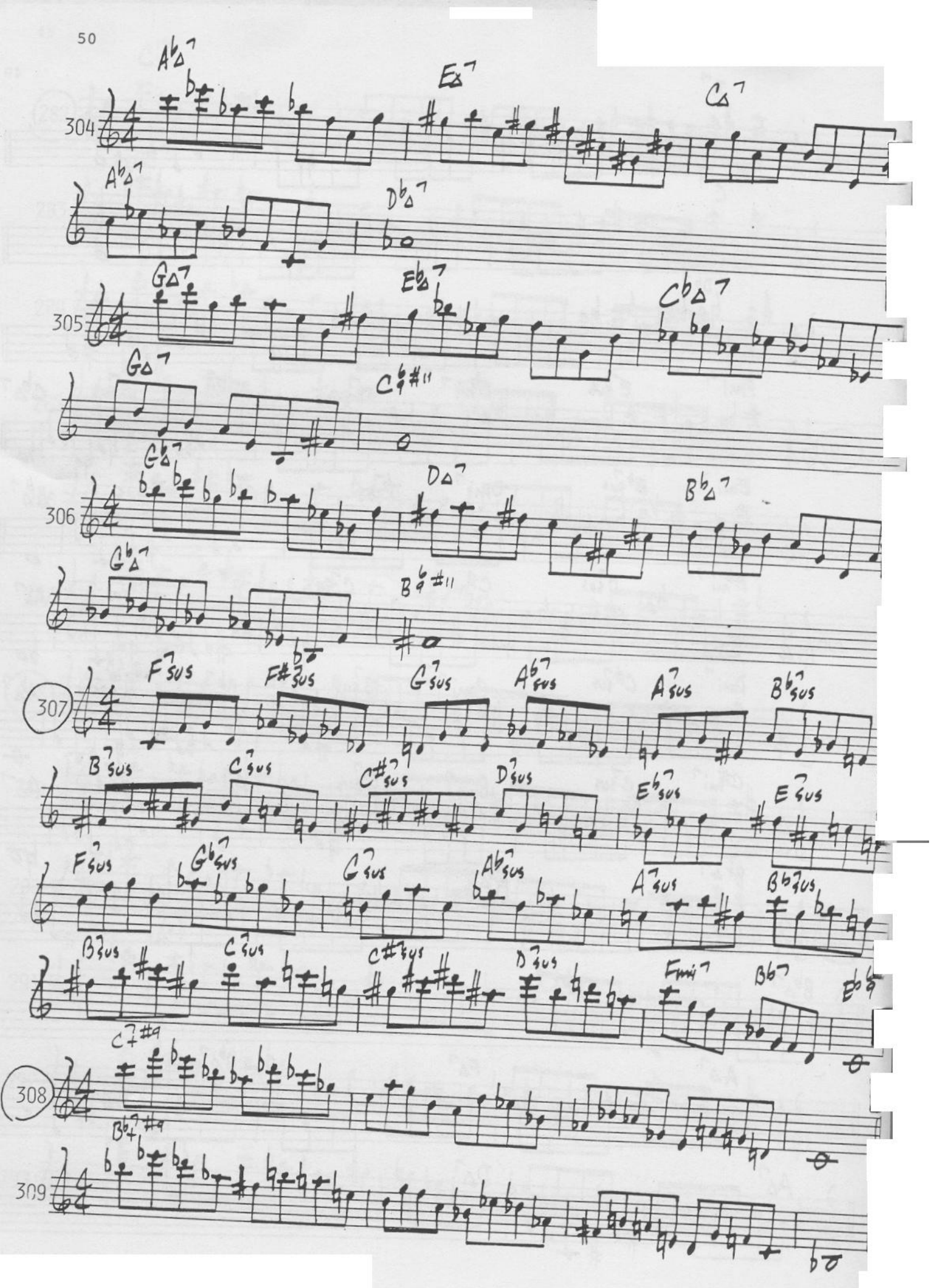

247 C7
248 Cb7
249 Bb7
250 A7
251 G7
252 Ab7
253 Gb7
254 Db7
255 D7
256 Eb7
257 E7
258 F7
259 Gmi7
260 F#mi7
261 Fmi7
262 G#mi7
263 Ami7
264 Bbmi7
265 Bmi7
266 Cmi7
267 C#mi7
268 Dmi7
269 Ebmi7
270 Emi7


C7
271
C#7
272
D7
273
Eb7
274
E7
275


276
Eb7#9
277
E7#9
278
F7#9
279
F#7#9
280
G7#9
281
Ab7#9


C7
282
C#7
283
D7
284
Eb7
285
E7
286
F7
287
F7
288
F#7
289
G7
290
Ab7
291
A7
292
Bb7
293


294
B7
C7
295
Db7
296
Fmi7
E7sus
Ebmi7
D7sus
297
Db7
C7sus
Cb△7
Emi7
Eb7sus
298
Dmi7
Db7sus
C7
B7sus
Bb△7
Ebmi7
D7sus
299
C#mi7
C7sus
B7
Bb7sus
A△7
Dmi7
C#7sus
300
Cmi7
B7sus
Bb7
A7sus
Ab△7
C#mi7
C7sus
301
Bmi7
Bb7sus
A7
Ab7sus
G△7
Bb△7
Gb△7
302
D△7
Bb△7
Eb△7
A△7
303
F△7
Db△7
A△7
D△7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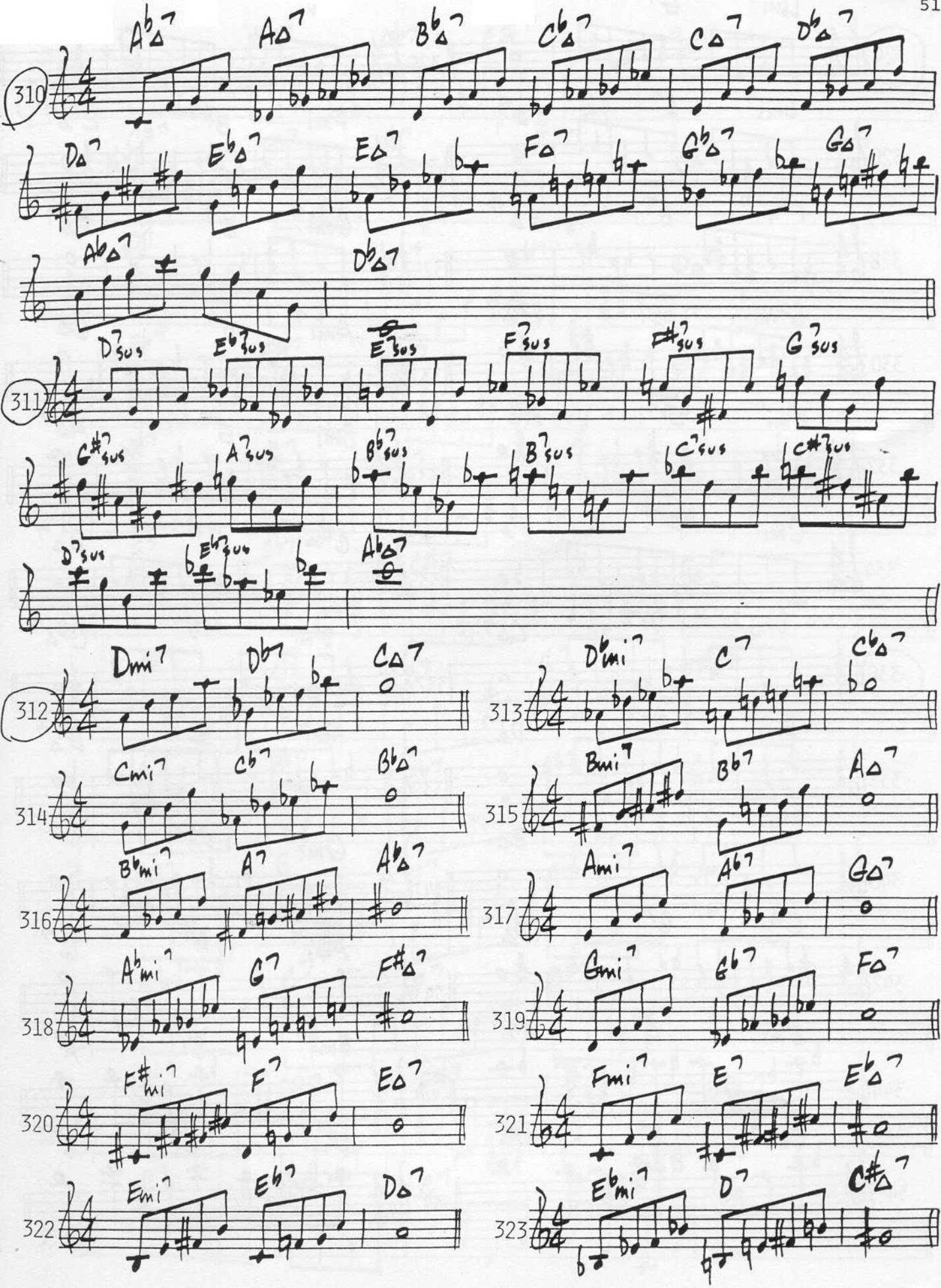
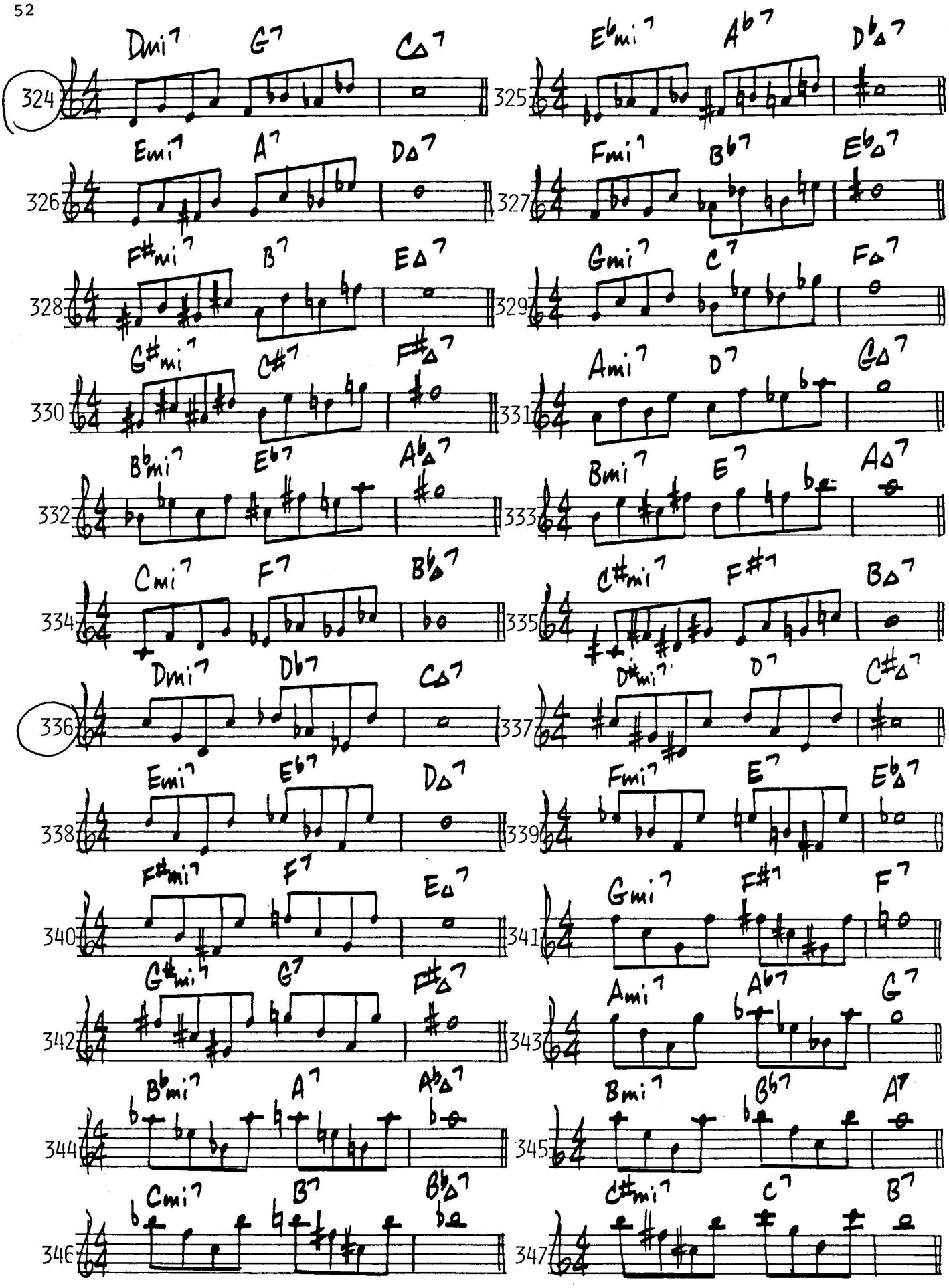
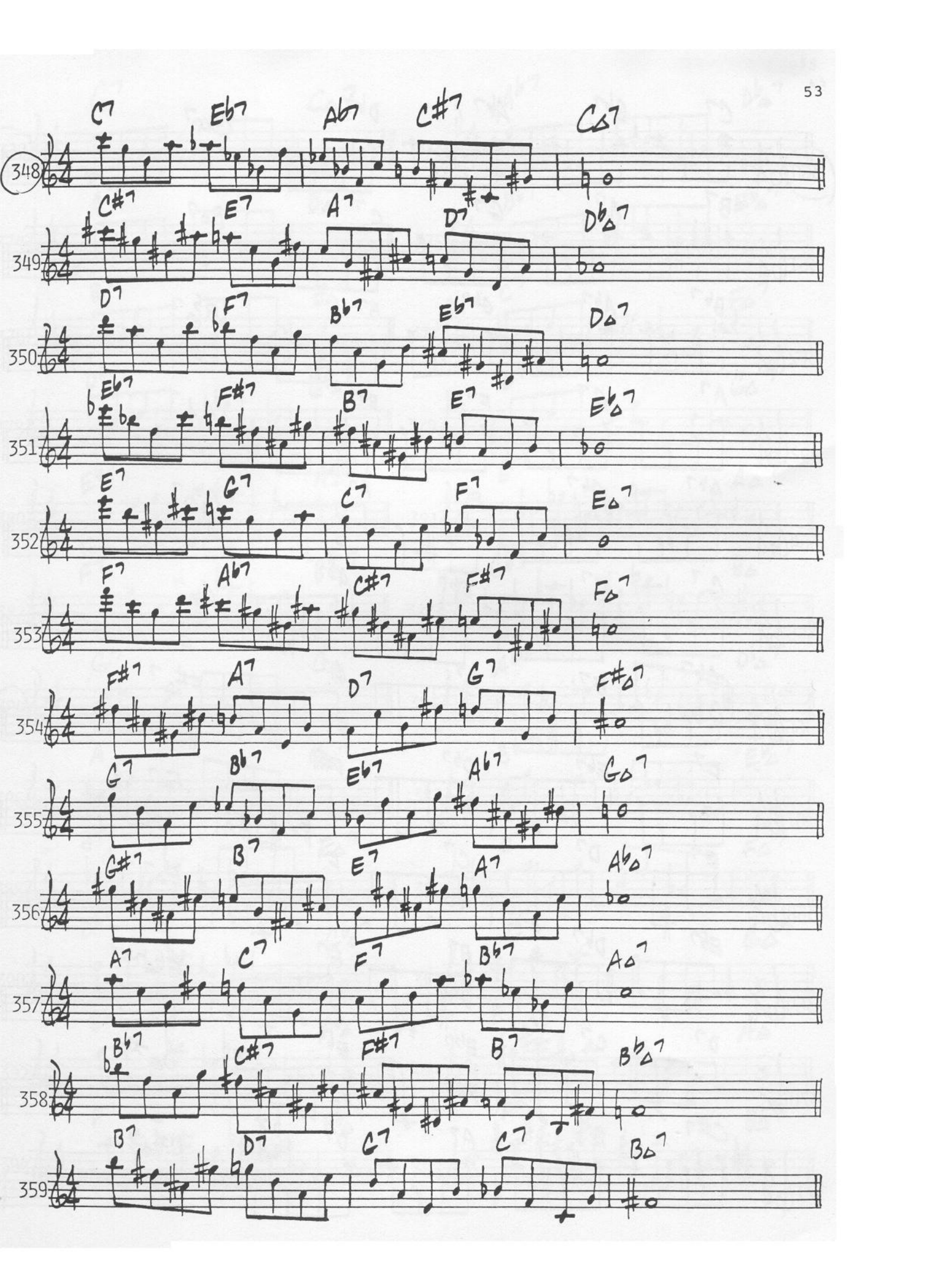
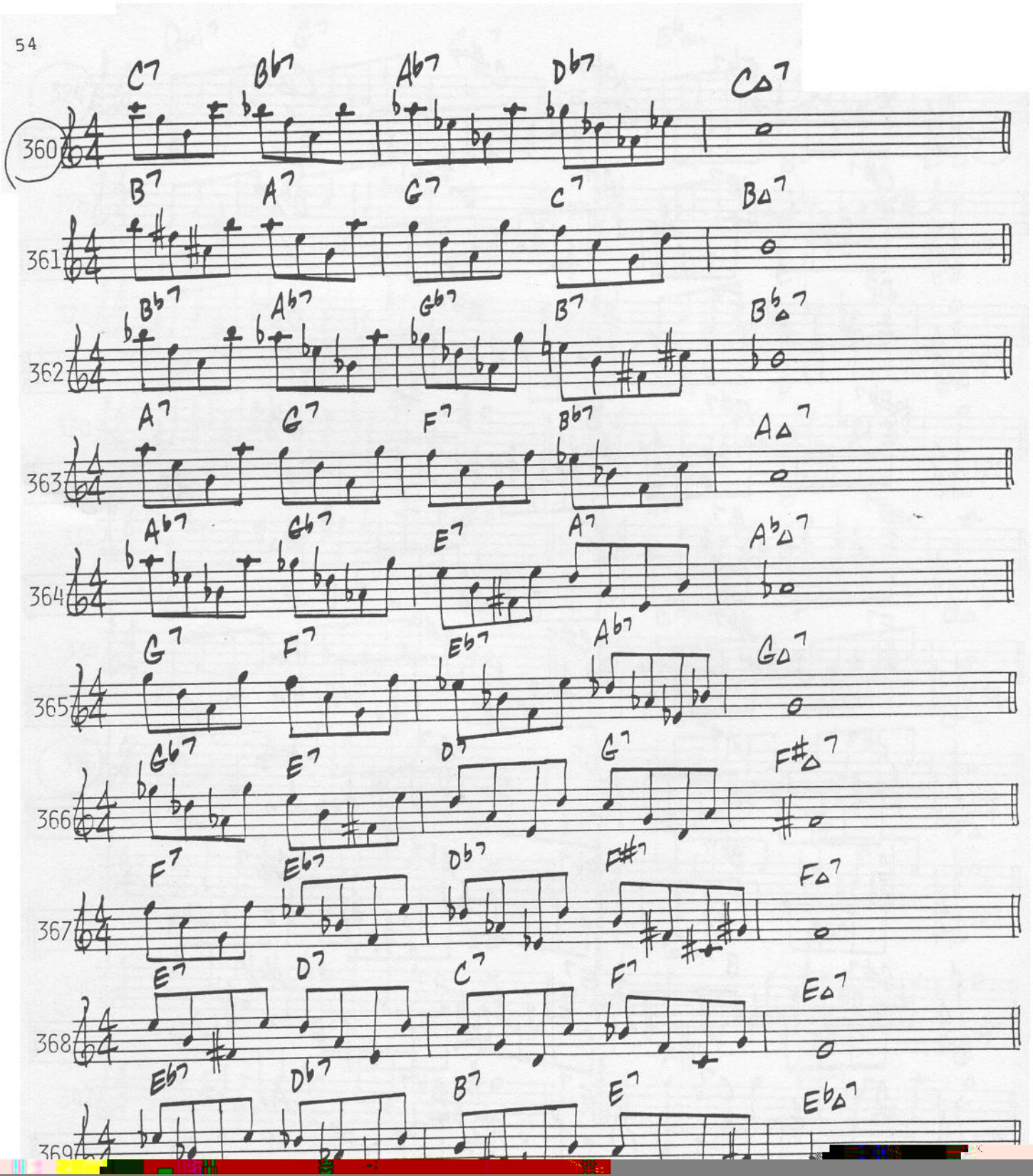
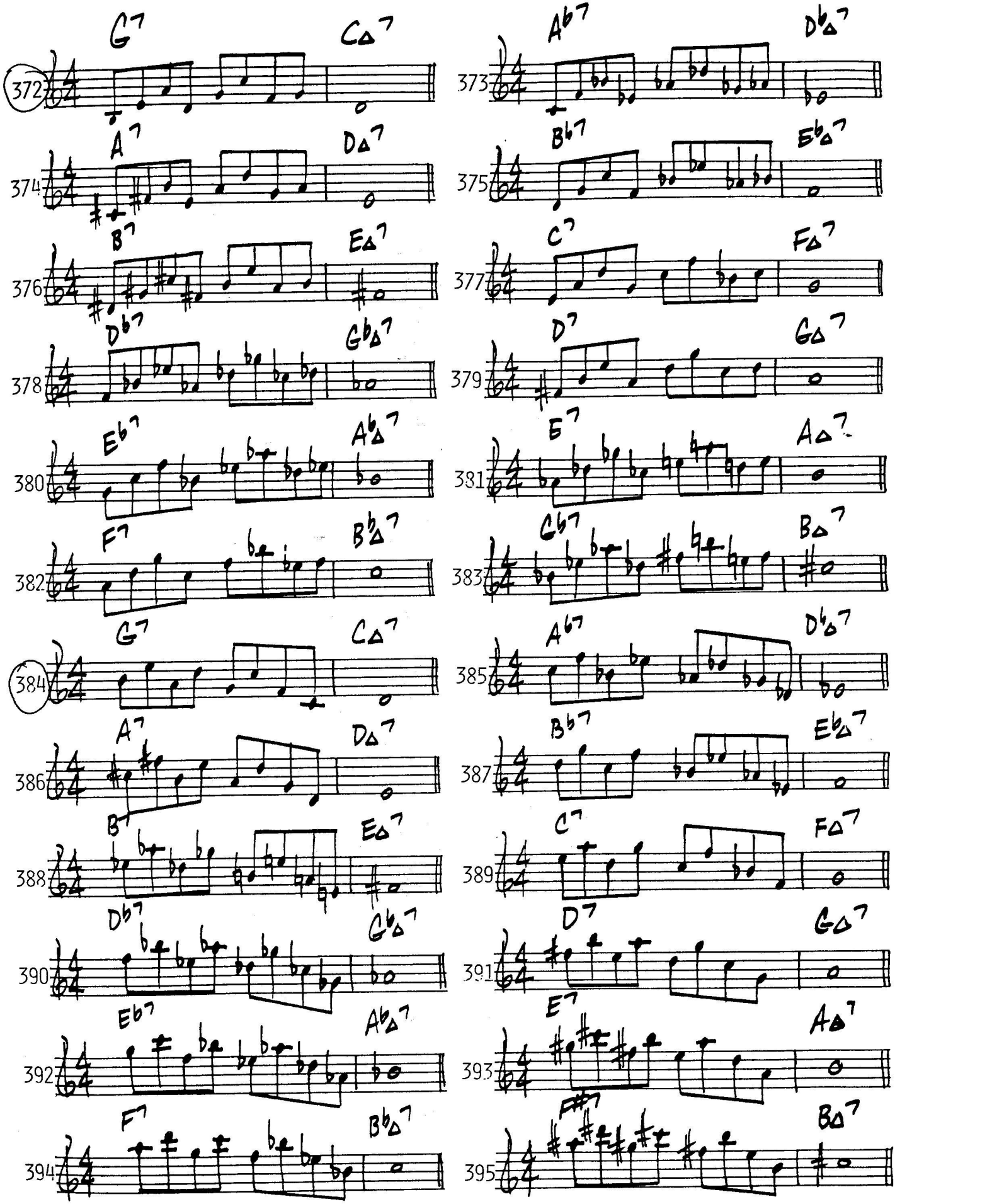
308
309

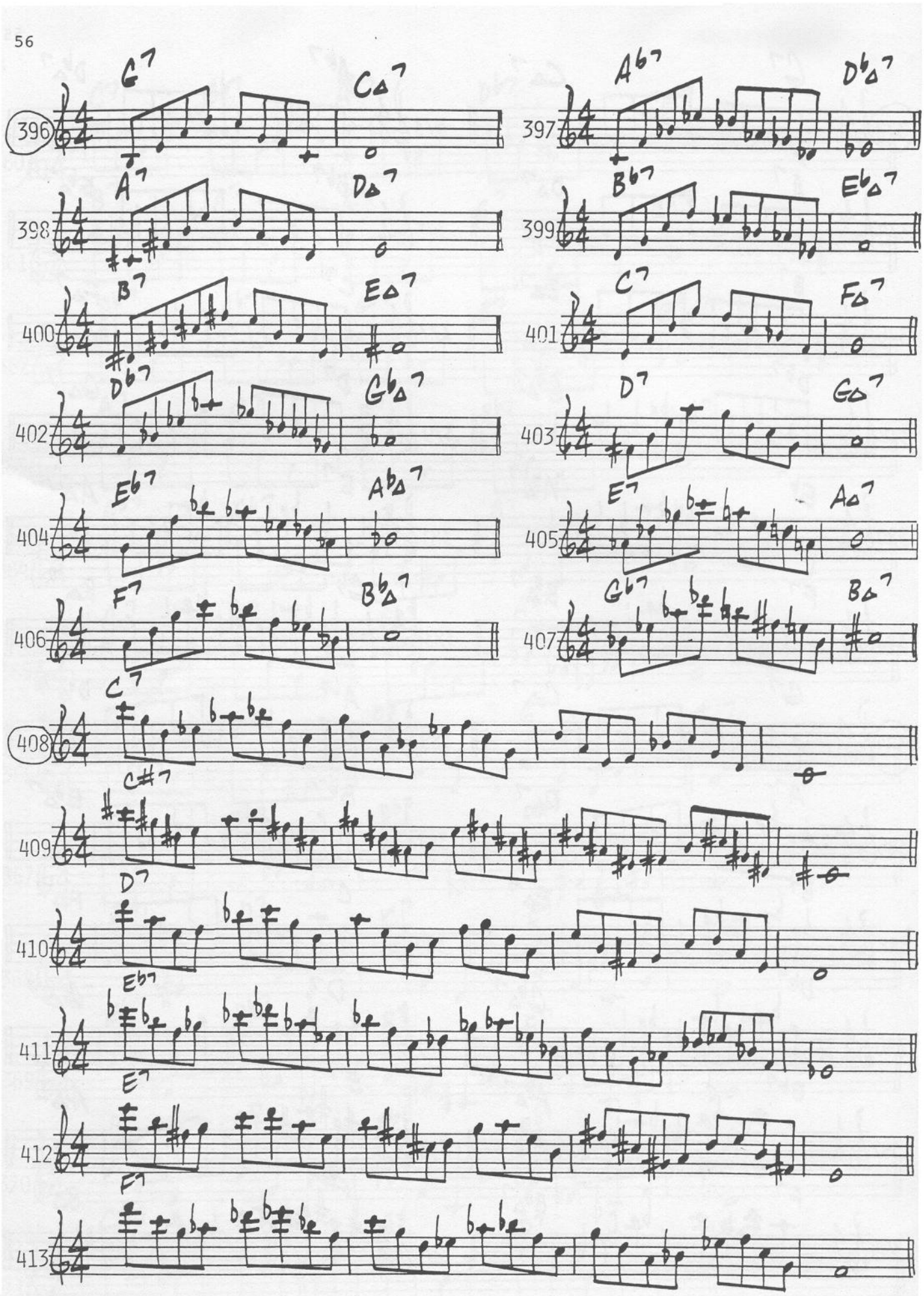

310
A♭Δ7 AΔ7 B♭Δ7 CΔ7 C♭Δ7 DΔ7 D♭Δ7
311
D7sus E♭7sus E7sus F7sus F♯7sus G7sus
312
Dmi7 D♭7 C♭Δ7
313
D♭mi7 C7
314
Cmi7 C♭7 B♭Δ7
315
Bmi7 B♭7 AΔ7
316
B♭mi7 A7 A♭Δ7
317
Ami7 A♭7 GΔ7
318
A♭mi7 G7 F♯Δ7
319
Gmi7 G♭7 FΔ7
320
F♯mi7 F7 EΔ7
321
Fmi7 E7 E♭Δ7
322
Emi7 E♭7 DΔ7
323
E♭mi7 D7 C♯Δ7

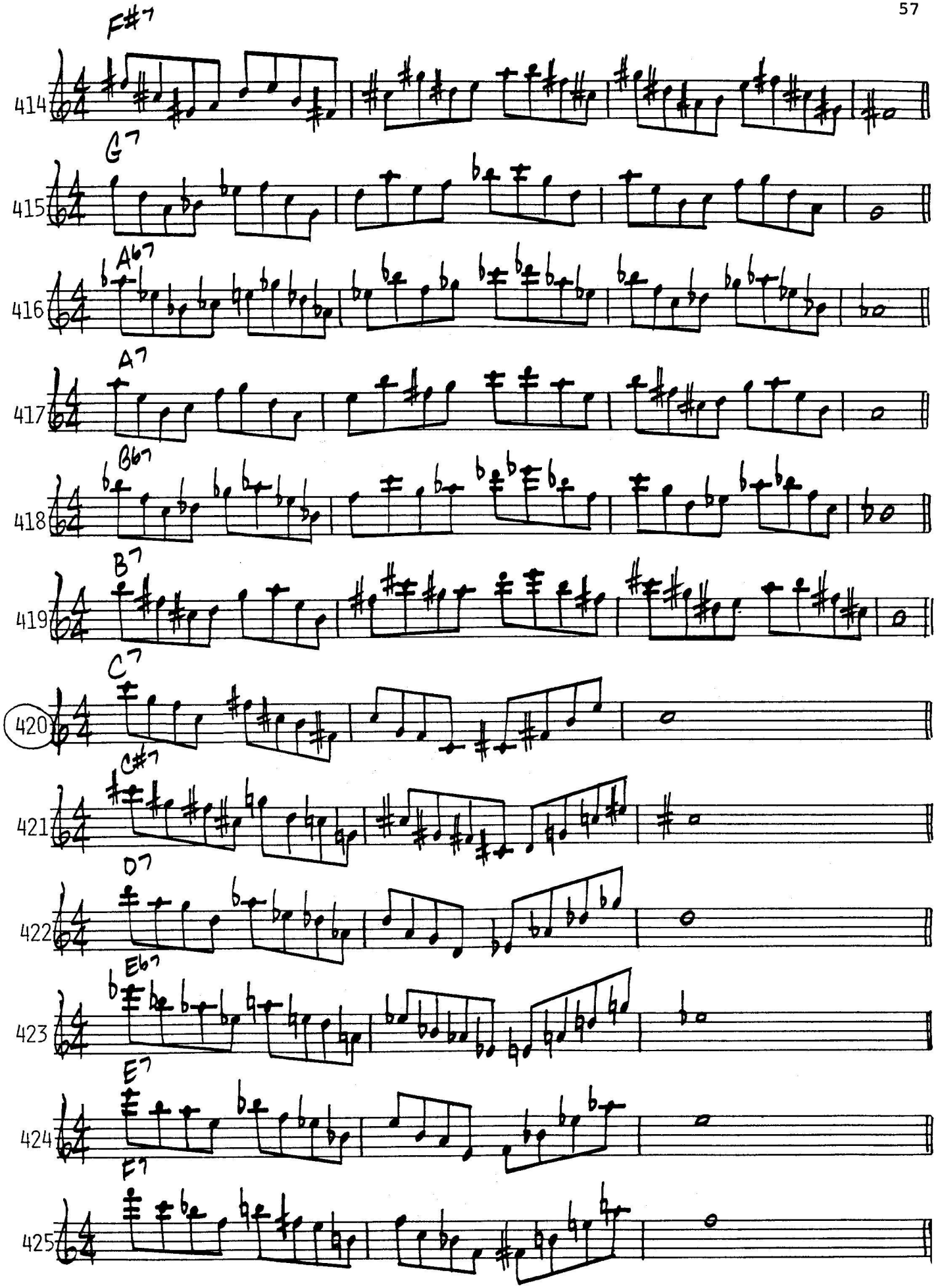

Dmi7 G7 C△7
324
Eᵇmi7 Aᵇ7 Dᵇ△7
325
Emi7 A7 D△7
326
Fmi7 Bᵇ7 Eᵇ△7
327
F♯mi7 B7 E△7
328
Gmi7 C7 F△7
329
G♯mi7 C♯7 F♯△7
330
Ami7 D7 G△7
331
Bᵇmi7 Eᵇ7 Aᵇ△7
332
Bmi7 E7 A△7
333
Cmi7 F7 Bᵇ△7
334
C♯mi7 F♯7 B△7
335
Dmi7 Dᵇ7 C△7
336
D♯mi7 D7 C♯△7
337
Emi7 Eᵇ7 D△7
338
Fmi7 E7 Eᵇ△7
339
F♯mi7 F7 E△7
340
Gmi7 F♯7 F7
341
G♯mi7 G7 F♯△7
342
Ami7 Aᵇ7 G7
343
Bᵇmi7 A7 Aᵇ△7
344
Bmi7 Bᵇ7 A7
345
Cmi7 B7 Bᵇ△7
346
C♯mi7 C7 B7
347


348
C7 Eb7 Ab7 C#7 C△7
349
C#7 E7 A7 D7 Db△7
350
D7 F7 Bb7 Eb7 D△7
351
Eb7 F#7 B7 E7 E△7
352
E7 G7 C7 F7 E△7
353
F7 Ab7 C#7 F#7 F△7
354
F#7 A7 D7 G7 F#△7
355
G7 Bb7 Eb7 Ab7 G△7
356
G#7 B7 E7 A7 Ab△7
357
A7 C7 F7 Bb7 A△7
358
Bb7 C#7 F#7 B7 B△7
359
B7 D7 C7 C7 B△7


360
C7 B♭7 A♭7 D♭7 C△7
361
B7 A7 G7 C7 B△7
362
B♭7 A♭7 G♭7 B7 B♭△7
363
A7 G7 F7 B♭7 A△7
364
A♭7 G♭7 E7 A7 A♭△7
365
G7 F7 E♭7 A♭7 G△7
366
G♭7 E7 D7 G7 F#△7
367
F7 E♭7 D♭7 F#7 F△7
368
E7 D7 C7 F7 E△7
369
E♭7 D♭7 B7 E7 E♭△7


372 G7 C△7
373 A♭7 D♭△7
374 A7 D△7
375 B♭7 E♭△7
376 B7 E△7
377 C7 F△7
378 D♭7 G♭△7
379 D7 G△7
380 E♭7 A♭△7
381 E7 A△7
382 F7 B♭△7
383 C♭7 B△7
384 G7 C△7
385 A♭7 D♭△7
386 A7 D△7
387 B♭7 E♭△7
388 B7 E△7
389 C7 F△7
390 D♭7 G♭△7
391 D7 G△7
392 E♭7 A♭△7
393 E7 A△7
394 F7 B♭△7
395 F#7 B△7


396
G7
C△7
397
A♭7
D♭△7
398
A7
D△7
399
B♭7
E♭△7
400
B7
E△7
401
C7
F△7
402
D♭7
G♭△7
403
D7
G△7
404
E♭7
A♭△7
405
E7
A△7
406
F7
B♭△7
407
G♭7
B△7
408
C7
C#7
409
D7
410
E♭7
411
E7
412
F7
413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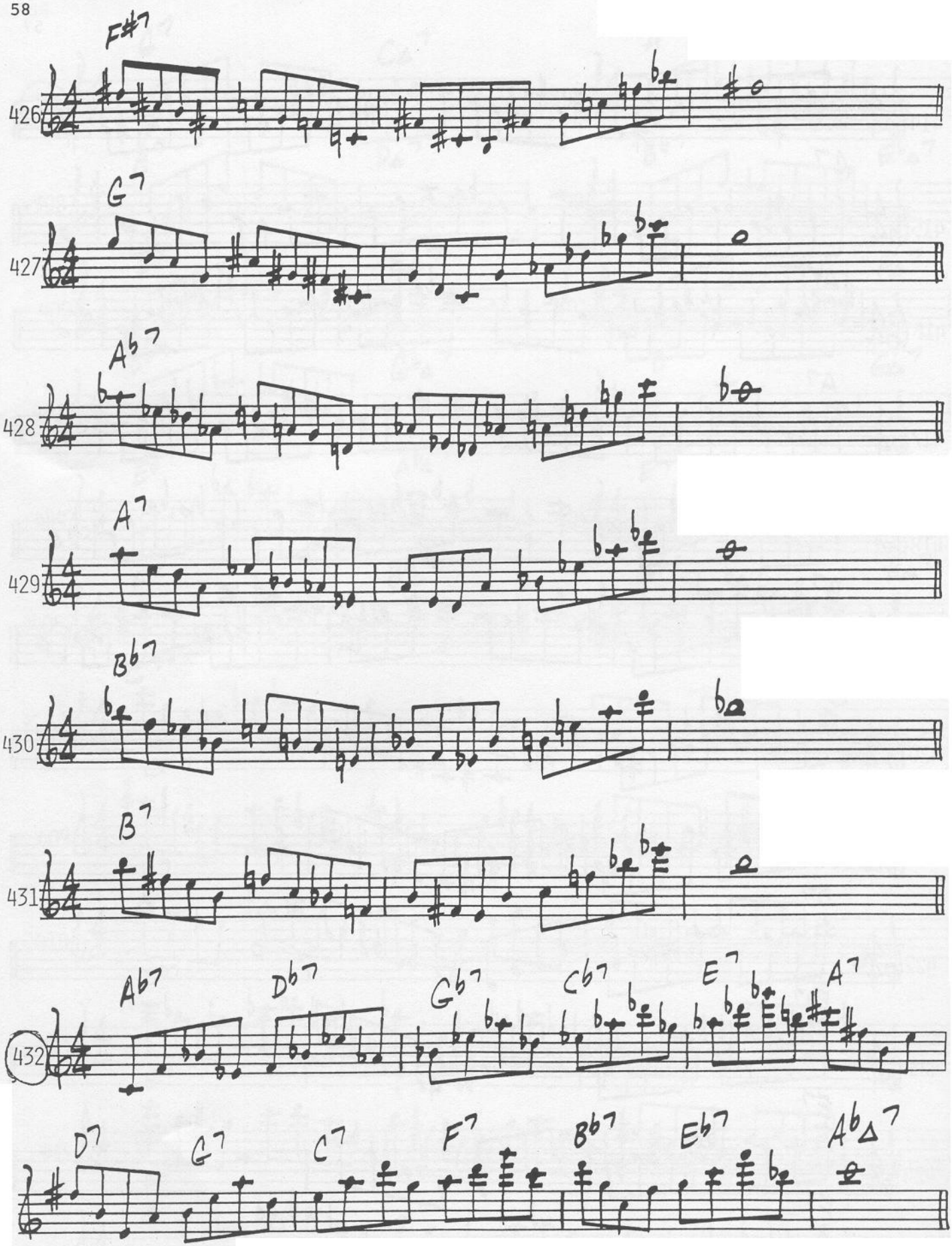
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E7
A7
432
D7
G7
C7
F7
Bb7
Eb7
Ab△7

DISCOGRAPHY

Artist	Selection	Album
Kenny Baron	*Two Wives*	*Earl and Carl Grubs (The Visitors Rebirth)*, Muse 5047
Jaki Byard	*Broadway*	*Live*, Prestige S-7419
Jaki Byard	*Twelve*	*Live*, Prestige S-7419
Chick Corea	*Matrix*	*Now He Sings, Now He Sobs*, Solid State SS18039
Chick Corea	*Steps*	*Now He Sings, Now He Sobs*, Solid State SS18039
Joe Farrell	*Broadway*	*Live*, Prestige S-7419
Joe Farrell	*Sound Down*	*Outback*, CTI 6014
Joe Farrell	*Twelve*	*Live*, Prestige S-7419
Steve Grossman	*Haresah*	*Some Shapes To Come* P.M. Records PMR-002
Steve Grossman	*Pressure Point*	*Some Shapes To Come* P.M. Records PMR-002
Herbie Handcock	*Handjive*	*Nefertiti*, Columbia CS-9594
Dave Liebman	*Pablo's Story*	*Lookout Farm*, ECM 1039 ST
Wayne Shorter	*Eighty-One*	*ESP*, Columbia CS-9150
Wayne Shorter	*Masquelero*	*Sorcerer*, Columbia CS-9532
Wayne Shorter	*Orbits*	*Miles Smiles*, Columbia CS-9401

ABOUT THE AUTHOR

Mr. Ricker is currently an Assistant Professor of Clarinet and Saxophone at the Eastman School of Music, where in addition to teaching clarinet and saxophone, he teaches jazz improvisation and is coordinator of the Woodwind Doublers Institute.

His many articles on jazz and studio teaching have appeared in *Woodwind World, The Instrumentalist, Music Journal,* and *The International Musician.* He is active as a composer/performer in both the classical and the jazz fields. His published works