

Player Piano Rolls in the Conlon Nancarrow Collection (PSS): An Annotated List

(sorted by roll number)

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This list of the player piano rolls from the Conlon Nancarrow Collection of the Paul Sacher Foundation was compiled as part of the research project “Conlon Nancarrow’s Studies for Player Piano: Towards a Critical Edition” (SNF 166478). The list refers also to a collection of corresponding [MIDI files](#) derived from optical scans of the original rolls. These files can be played with the [Nancarrow Sampler](#), a virtual instrument constructed with the sounds and noises of one of Nancarrow’s player pianos. Both the MIDI files and the sampler are available for research at the Paul Sacher Foundation.

About the List Columns

ROLL NO.

The roll number is based on the PSS assigned numeration, adapted as follows:

PSS	Annotated List
Klavierrolle [Nr. 1]	R001

The list is sorted by roll number.

TITLE ON ROLL

This column reproduces the title or titles written by the composer at the beginning of the original player piano roll. Erased, corrected, or crossed-out titles that remain legible are entered between square brackets []. Entries in a foreign hand are noted under “Remarks.” Header inscriptions other than title are not included (e.g.: reproduction tempo).

CONTENTS

This column provides the work’s title (when known) and a brief qualification of the contents (e.g.: alternative version, incomplete contents, fragment, sketch, etc.). The term alternative (ALT) includes earlier, contemporary, or posterior versions different than the definitive roll. The term incomplete (INC) is utilized when the contents cover a substantial part of a work (more than its half). Fragments are comparatively shorter.

REMARKS

This column covers the following areas:

- Specification of the contents. In the cases where a connection with a specific work is not identified, the remarks offer a brief description of the musical contents. System numbers are based on roll annotations. This numeration generally coincides with the systems in Nancarrow’s punching and final manuscript scores.
- Comments specific to the roll:
 - Comments on title, manufacture, chronology.
 - Duration indication: the duration indication on the roll box is mentioned only when it differs from the indication on the roll or when the latter is missing.
 - Tempo templates: the tempo-template markings were introduced by Nancarrow after the modification of his punching machine, following *Study No. 21*. The presence of these markings indicates a roll manufacture posterior to this piece.
- Commentary on the connection with related rolls.
- Technical remarks about the MIDI files.
- Relation to other works.
- Publication information (scores).

RELATED ROLLS

List of cross-related rolls, based on contents or affiliation.

Rolls that contain definitive versions appear in **bold** type within this column.

MIDI FILES

List of the corresponding MIDI files derived from the optical scans of the original rolls.

The tempos suggested for the reproduction of the MIDI files are expressed in beats per minute (bpm)

Abbreviations and Symbols

ALT	Alternative version
C	Copy
CR	Commercial Roll
IC	Industrial Copy
INC	Incomplete
Mov.	Movement
MS	Manuscript
NI	Not Identified
PSS	Paul Sacher Stiftung
TT	Tempo Templates
--	No entry

Publishers

Boosey & Hawkes, New York

Edition C. F. Peters, New York/London/Frankfurt

[Music Theory Online](#)

New Music Edition (A Quarterly of Modern Composition), Los Angeles

Schott Music International, Mainz

Sonic Arts Editions/Smith Publications, Baltimore

Soundings Press, Santa Fe

Conlon Nancarrow Collection (PSS): An Annotated List of Player Piano Rolls
(sorted by roll number)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R001	R.S. I	Study No. 1	Definitive version of Study No. 1. Title on roll: "R.S." stands for Rhythmic Study. Duration indication on roll: 2:10 Roll without TT. Publication: <i>New Music</i> 25, No. 1, 1951 (published as "Rhythmic Study No. 1")	--	R001_Study1.MID (tempo 180)
R002	R.S. 2a	Study No. 2a	Definitive version of Study No. 2a. Title on roll: "R.S." stands for Rhythmic Study. Duration indication on roll box: 2:05 Roll with TT. The presence of tempo templates indicates a late manufacture of this roll. R141 contains an earlier version of Study No. 2a. R004, R005, and R006 contain varied versions of the piece, with different temporal proportions for both melody and accompaniment. These varied versions are known as "Didactic Studies." Related to: Studies No. 2x, 2y, and 2z ("Didactic Studies") Publication: Soundings Press, 1984 / Schott, 1988.	R004 R005 R006 R141	R002_Study2a.MID (tempo 160)
R003	[R.S. 32] V. 2 II	Study No. 2b	Definitive version of Study No. 2b. Title on roll: "R.S." stands for Rhythmic Study and "V." for Variation. Duration indication on roll: 1:10 Roll without TT. Related to: - Variations (MS, PSS), early work for player piano, partially missing (correspondence with Variation VI) - Three Pieces, Mov. 3 (MS, PSS) - Piece No. 1 for Small Orchestra (Smith Publications, 1987) - Suite for Orchestra (MS, PSS)	R010 R011 R146	R003_Study2b.MID (tempo 84)
R004	#2 [b] x 5/9 (2-1)	Study No. 2x	Varied version of Study No. 2a, based on different temporal proportions (Didactic Study). Title on roll: "5/9" refers to the temporal proportion for the accompaniment and "(2-1)" to the additive rhythmic pattern for the melody. Roll with TT. Related to: - Study No. 2a - Studies No. 2y and 2z	R002 R005 R006 R141	R004_Study2x.MID (tempo 130)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R005	(#2 c) [#44] 4/7 (3-2)	Study No. 2y	<p>Varied version of Study No. 2a, based on different temporal proportions (Didactic Study)</p> <p>Title on roll: "4/7" refers to the temporal proportion for the accompaniment and "(3-2)" to the additive rhythmic pattern for the melody. Roll with TT.</p> <p>Related to: - Study No. 2a - Studies No. 2x and 2z</p>	R002 R004 R006 R141	R005_Study2y.MID (tempo 130)
R006	2d 5/7 (3-1)	Study No. 2z	<p>Varied version of Study No. 2a, based on different temporal proportions (Didactic Study)</p> <p>Title on roll: "5/7" refers to the temporal proportion for the accompaniment and "(3-1)" to the additive rhythmic pattern for the melody. Roll with TT.</p> <p>Related to: - Study No. 2a - Studies No. 2x and 2y</p>	R002 R004 R005 R141	R006_Study2z.MID (tempo 130)
R007	B.W.1 3A	Study No. 3a	<p>Definitive version of Study No. 3a (Study No. 3, Mov. 1).</p> <p>Title on roll: "B.W." stands for Boogie Woogie. Duration indication on roll box: 3:30 Roll without TT.</p> <p>Related to: - Original affiliation with Studies No. 3b and 3e, Boogie-Woogie set (MS, PSS) - Definitive affiliation with Studies No. 3b, 3c, 3d, 3e (Study No. 3)</p> <p>Publication: Soundings Press, 1983 / Schott 1988.</p>	R008 R009 R010 R011 R012 R140	R007_Study3a.MID (tempo 180)
R008	B.W.2 #3B	Study No. 3b	<p>Definitive version of Study No. 3b (Study No. 3, Mov. 2).</p> <p>Title on roll: "B.W." stands for Boogie Woogie. Duration indication on roll: [5:00] [4:50] 4:45 Duration indication on roll box: 4:45 Roll without TT.</p> <p>Related to: - Original affiliation with Studies No. 3a and 3e, Boogie-Woogie set (MS, PSS) - Definitive affiliation with Studies No. 3a, 3c, 3d, 3e (Study No. 3)</p> <p>Publication: Soundings Press, 1983 / Schott 1988.</p>	R007 R009 R010 R011 R012 R140	R008_Study3b.MID (tempo 120)
R009	--	Study No. 3c ALT	<p>Early version of Study No. 3c.</p> <p>Roll without TT.</p>	R010 R007 R008 R011 R012 R140	R009_Study3c_ALT.MID (tempo 150)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R010	3C	Study No. 3c	Definitive version of Study No. 3c (Study No. 3, Mov. 3). Duration indication on roll: 2:50 Roll without TT. R009 contains an early version of the piece. Related to: - Three Pieces, Mov. 1 (MS, PSS) - Studies No. 3a, 3b, 3d, and 3e (Study No. 3) Publication: Soundings Press, 1983 / Schott, 1988.	R009 R007 R008 R011 R012 R140	R010_Study3c.MID (tempo 150)
R011	3D	Study No. 3d	Definitive version of Study No. 3d (Study No. 3, Mov. 4). Title on roll: crossed out annotations in title (not legible). Duration indication on roll box: 2:10 Roll without TT. Related to: - Three Pieces, Mov. 2 (MS, PSS) - Piece No. 1 for Small Orchestra (Smith Publications, 1987) - Suite for Large Orchestra (MS, PSS) - Variations (MSS, PSS), Variation VII - Studies No. 3a, 3b, 3c, and 3e (Study No. 3) - Septet (Smith Publications, 1994) Publication: Soundings Press, 1983 / Schott, 1988.	R003 R007 R008 R009 R010 R012 R140 R146	R011_Study3d.MID (tempo 142)
R012	B.W.III	Study No. 3e	Definitive version of Study No. 3e (Study No. 3, Mov. 5). Title on roll: "B.W" stands for Boogie Woogie. Duration indication on roll: 2:30 Roll without TT. R140 contains an alternative version of the piece. Related to: - Original affiliation with Studies No. 3a and 3b, Boogie-Woogie set (MS, PSS) - Definitive affiliation with Studies No. 3a, 3b, 3c, 3d (Study No. 3) Publication: Soundings Press, 1983 / Schott, 1988.	R007 R008 R009 R010 R011 R140	R012_Study3e.MID (tempo 130)
R013	#4	Study No. 4	Definitive version of Study No. 4. Duration indication on roll: 3:00 Roll without TT. An earlier version contained an additional middle section (documentary recording, PSS). The placement of the deleted section coincides with a roll cut. Publication: Soundings Press, 1985 / Schott, 1988.	--	R013_Study4.MID (tempo 100)
R014	R.S. V	Study No. 5	Definitive version of Study No. 5. Title on roll: "R.S." stands for Rhythmic Study. Duration indication on roll box: 2:15 Roll without TT. Publication: Soundings Press, 1985 / Schott, 1988.	--	R014_Study5.MID (tempo 150)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R015	R.S. VI	Study No. 6	Definitive version of Study No. 6. Title on roll: "R.S." stands for Rhythmic Study. Duration indication on roll: 2:45 Roll without TT. Publication: Soundings Press, 1984 / Schott 1988.	--	R015_Study6.MID (tempo 150)
R016	#7	Study No. 7	Definitive version of Study No. 7. Duration indication on roll: 7:00 Roll without TT. Publication: Soundings Press, 1984 / Schott 1988.	--	R016_Study7.MID (tempo 142)
R017	R.S. VIII	Study No. 8	Definitive version of Study No. 8. Title on roll: "R.S." stands for Rhythmic Study. Duration indication on roll box: 4:00 Roll without TT. The roll shows a cut at the end (possibility of an earlier longer version). Publication: Soundings Press, 1977 / Schott, 1988.	--	R017_Study8.MID (tempo 190)
R018	R.S. IX	Study No. 9	Definitive version of Study No. 9. Title on roll: "R.S." stands for Rhythmic Study. Duration indication on roll box: 4:00 Roll without TT. Several sectional cuts in the roll. Publication: Soundings Press, 1985 / Schott 1988.	--	R018_Study9.MID (tempo 190)
R019	#10	Study No. 10	Definitive version of Study No. 10. Roll without TT. Duration indication on roll: 3:00 An earlier version had an additional opening section. Roll cut at the beginning. R216 contains the removed original opening. Publication: Soundings Press, 1985 / Schott 1988.	R216	R019_Study10.MID (tempo 130)
R020	R.S. XI	Study No. 11	Definitive version of Study No. 11. Title on roll: "R.S." stands for Rhythmic Study. Duration indication on roll box: 3:20 Roll without TT. Publication: Soundings Press, 1985 / Schott 1988.	--	R020_Study11.MID (tempo 200)
R021	R.S. XII	Study No. 12	Definitive version of Study No. 12. Title on roll: "R.S." stands for Rhythmic Study. Duration indication on roll: 4:20 Duration indication on roll box: 4:00 Roll without TT. Publication: Soundings Press, 1985 / Schott, 1988.	--	R021_Study12.MID (tempo 140)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R022	R.S. XIII	Study No. 13	<p>Definitive version of Study No. 13.</p> <p>Title on roll: "R.S." stands for Rhythmic Study. Duration indication on roll: 2:30 Roll without TT.</p> <p>R215 contains a fragment of an alternative version of the piece (opening).</p> <p>Related to: Original affiliation with Studies No. 14–19 (Seven Canonic Studies, part 1)</p>	R023 R024 R025 R026 R027 R028 R215	R022_Study13.MID (tempo 130)
R023	[R.S. XIII P.2] R.S. 14 (4/5)	Study No. 14	<p>Definitive version of Study No. 14.</p> <p>Title on roll: "R.S." stands for Rhythmic Study. Duration indication on roll: 1:15 Roll without TT.</p> <p>Related to: Original affiliation with Studies No. 13, 15–19 (Seven Canonic Studies, part 2)</p> <p>Publication: Soundings Press, 1984 / Schott, 1988.</p>	R022 R024 R025 R026 R027 R028	R023_Study14.MID (tempo 150)
R024	R.S. XIII (p.3) R.S. 15 (3/4)	Study No. 15	<p>Definitive version of Study No. 15.</p> <p>Title on roll: "R.S." stands for Rhythmic Study. Duration indication on roll: 0:56 Roll without TT.</p> <p>Related to: Original affiliation with Studies No. 13, 14, 16–19 (Seven Canonic Studies, part 3)</p> <p>Publication: Soundings Press, 1976 und 1985 / Schott, 1988.</p>	R022 R023 R025 R026 R027 R028	R024_Study15.MID (tempo 170)
R025	R.S. XIII P. 4 R.S. [XIII] 16	Study No. 16	<p>Definitive version of Study No. 16.</p> <p>Title on roll: "R.S." stands for Rhythmic Study. Duration indication on roll box: 3:10 Roll without TT.</p> <p>Related to: Original affiliation with Studies No. 13–15, 17–19 (Seven Canonic Studies, part 4)</p> <p>Publication: Soundings Press, 1976 und 1985 / Schott, 1988.</p>	R022 R023 R024 R026 R027 R028	R025_Study16.MID (tempo 200)
R026	R.S. XIII (P. 5) R.S. 17 (12/15/20)	Study No. 17	<p>Definitive version of Study No. 17.</p> <p>Title on roll: "R.S." stands for Rhythmic Study. Duration indication on roll: 1:15 Roll without TT.</p> <p>Related to: Original affiliation with Studies No. 13–16, 18, 19 (Seven Canonic Studies, part 5).</p> <p>Publication: Soundings Press, 1985 / Schott, 1988.</p>	R022 R023 R024 R025 R027 R028	R026_Study17.MID (tempo 140)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R027	R.S. XIII (P. 6) R.S. 18 (3/4)	Study No. 18	Definitive version of Study No. 18. Title on roll: "R.S." stands for Rhythmic Study. Duration indication on roll: 2:00 Roll without TT. R076 contains an alternative version of the piece (posterior) Related to: Original affiliation with Studies No. 13–17, 19 (Seven Canonic Studies, part 6). Publication: Soundings Press, 1985 / Schott, 1988.	R022 R023 R024 R025 R026 R028 R076	R027_Study18.MID (tempo 200)
R028	R.S. XIII (P. 1) R.S. 19 (12/15/20) Paris Tempo 90	Study No. 19	Definitive version of Study No. 19. Title on roll: "R.S." stands for Rhythmic Study. "Paris Tempo 90" written by Jürgen Hocker. Title on roll box: [R.S. XIII (P. 7)] Duration indication on roll: 1:15 Roll without TT. Related to: Original affiliation with Studies No. 13–18 (Seven Canonic Studies, part 7). Publication: Soundings Press, 1977 / Schott, 1988.	R022 R023 R024 R025 R026 R027	R028_Study19.MID (tempo 200)
R029	R.S. [14] 20 R.S. 20	Study No. 20	Definitive version of Study No. 20. Title on roll: "R.S." stands for Rhythmic Study. Duration indication on roll: 5:45 Roll without TT. R090 contains a fragment of the piece (beginning). Publication: Soundings Press, 1984 / Schott, 1988.	R090	R029_Study20.MID (tempo 168)
R030	R.S. [XV] 21 R.S. 21 (X)	Study No. 21	Definitive version of Study No. 21. Title on roll: "R.S." stands for Rhythmic Study. Duration indication on roll: 3:05 Roll without TT. R097 contains 2 sketches possibly related to the piece. Publication: Soundings Press, 1973 und 1984 / Schott, 1988.	R097	R030_Study21.MID (tempo 230)
R031	R.S. 22 (1%/1½%/2¼%)	Study No. 22	Definitive version of Study No. 22. Title on roll: "R.S." stands for Rhythmic Study. Roll with TT.	--	R031_Study22.MID (tempo 215)
R032	R.S. 23	Study No. 23	Definitive version of Study No. 23. Title on roll: "R.S." stands for Rhythmic Study. Duration indication on roll: 4:00 Roll with TT. R033 same contents as R032 R107 is a Play Rite industrial copy of this roll. R186 contains an early version of the piece. Publication: Soundings Press, 1977 / Schott, 1988.	R033 R107 R114 R115 R116 R120 R186	R032_Study23.MID (tempo 215)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R033	[R.S.16 14 15 16] Unknown finished "D"	Study No. 23	Definitive version of Study No. 23. Title on roll: "R.S." stands for Rhythmic Study. "14 15 16" stands for the tempo proportions in Study No. 24. "Unknown finished "D"" written by Carlos Sandoval. Roll with TT. Musical contents: same as in R032	R032 R107 R114 R115 R116 R120 R186	R033_Study23.MID (tempo 215)
R034	R.S. 24 (14/15/16)	Study No. 24	Definitive version of Study No. 24. Title on roll: "R.S." stands for Rhythmic Study. Duration indication on roll box: 4:00 Roll with TT. Piece possibly conceived chronologically right after Study No. 21. R033 and R035 contain earlier versions of the piece. R108 is a Play Rite industrial copy of this roll. Publication: Soundings Press, 1973 and 1984 / Schott, 1988.	R035 R108	R034_Study24.MID (tempo 190)
R035	R.S. [16] 24 14:15:16 "JJ"	Study No. 24 ALT	Early version of Study No. 24, shorter. Systems 60–69 are cut in this version. Title on roll: "R.S." stands for Rhythmic Study. "JJ" in foreign hand. Duration indication on roll: 4:00 Roll with TT (same templates as in the definitive R034).	R034 R108	R035_Study24_ALT .MID (tempo 190)
R036	R.S. 25 #25	Study No. 25	Definitive version of Study No. 25. Title on roll: "R.S." stands for Rhythmic Study. Duration indication on roll: 5:30 Roll with TT. Flexible use of different template combinations, subsequently and simultaneously. Publication: Soundings Press, 1975 / Schott, 1988.	--	R036_Study25.MID (tempo 230)
R037	26 (1/1) Sin ped. Paris Tempo 58 (4:45)	Study No. 26	Definitive version of Study No. 26. Title on roll: "Sin ped." stands for "without pedal". "Paris Tempo 58 (4:45)" written by Jürgen Hocker. Duration indication on roll: 5:00 Roll without TT. The lack of tempo templates indicates an earlier conception than the numeration 26 suggests. Publication: Soundings Press, 1984 / Schott, 1988.	--	R037_Study26.MID (tempo 130)
R038	#27	Study No. 27	Definitive version of Study No. 27. Duration indication on roll box: 6:00 Roll with TT. R039, R151, and R213 contain fragments of the piece. Publication: Soundings Press, 1977 / Schott 1988.	R039 R151 R213	R038_Study27.MID (tempo 200)
R039	R.S. 27 (part 1)	Study No. 27 ALT INC	Incomplete early version of Study No. 27 (until system 78). Title on roll: "R.S." stands for Rhythmic Study. The roll includes and insertion of blank paper for systems 72–75. Roll with TT. MIDI file R039A: Scan with errors, without blank paper inserted for the missing section. MIDI file R039B: With blank paper inserted in the missing section.	R038 R151 R213	R039A_Study27_AL T_INC.MID (tempo 200) R039B_Study27_AL T_INC.MID (tempo 200)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R040	[34] #28	Study No. 28	Definitive version of Study No. 28 Duration indication on roll: 3:40 Roll with TT. Piece originally conceived for prepared player piano.	--	R040_Study28.MID (tempo 200)
R041	#29	Study No. 29	Definitive version of Study No. 29 Duration indication on roll: 3:20 Roll with TT. Piece originally conceived for prepared player piano. R119, R169, and R212 contain fragments of alternative versions of the piece.	R119 R169 R212	R041_Study29.MID (tempo 230)
R042	[28] 30	Study No. 30	Definitive version of Study No. 30 for prepared player piano. Additional title information on roll box: R.S. 30 (P. 3) Duration indication on roll: 3:00 Duration indication on roll box: 3:20 Roll with TT. The roll contains no indications regarding the preparations. The music is divided into 109 small sections in the roll. R091 contains an incomplete alternative version of the piece.	R091	R042_Study30.MID (tempo 200)
R043	#31 21/24/25	Study No. 31	Definitive version of Study No. 31. Title on Roll: Erased number below "#31" in the title. Duration indication on roll: 1:30 Roll with TT. R191 is a Play Rite industrial copy of this roll. Publication: Soundings Press, 1977 / Schott, 1988.	R191	R043_Study31.MID (tempo 210)
R044	#32 5/6/7/8	Study No. 32	Definitive version of Study No. 32. Duration indication on roll: 2:25 Roll without TT. Roll cut at the beginning. An earlier version had an additional opening section. R142 contains an alternative version of the piece. Publication: Soundings Press, 1977 / Schott, 1988.	R142	R044_Study32.MID (tempo 160)
R045	33 √2/2	Study No. 33	Definitive version of Study No. 33. Duration indication on roll: 6:00 Roll with TT. R092 contains a fragment of an earlier version of the piece (second part). Publication: Soundings Press, 1984 / Schott, 1988.	R092	R045_Study33.MID (tempo 194)
R046	[#36] #34 $\frac{9}{4/5/6} / \frac{10}{4/5/6} / \frac{11}{4/5/6}$	Study No. 34	Definitive version of Study No. 34. Duration indication on roll: 3:55 Duration indication on roll box: 4:55 Roll with TT. R093 contains an early version of the piece. R180 contains an incomplete early version of the piece. Publication: Schott (in preparation).	R093 R180	R046_Study34.MID (tempo 130)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R047	[36] 40 [38] #35	Study No. 35	Definitive version of Study No. 35. Duration on roll: 7:30 Duration on roll box: 6:10 Roll with TT. Roll with many cuts and corrections. R051, R125, R173, R178, R211, R218, and R220 contain fragments of alternative versions of the piece. R188 contains a short fragment possibly related to the piece. Publication: Soundings Press, 1977 / Schott, 1988.	R051 R125 R173 R178 R188 R211 R218 R220	R047_Study35.MID (tempo 120)
R048	#36 17/18/19/20	Study No. 36	Definitive version of Study No. 36. Duration on roll: 3:40 Duration on roll box: 3:50 Roll with TT. R205 contains a fragment of an earlier version of the piece. R236 contains tempo template drawings related to the piece. Publication: Soundings Press, 1977 / Schott, 1988.	R205 R236	R048_Study36.MID (tempo 180)
R049	37 150..... 281 ¼	Study No. 37	Definitive version of Study No. 37. Title on roll: Erased number under "37". "150..... 281 ¼" is an abbreviation of the twelve tempos in the piece's subtitle. Duration indication on roll: 12:00 Roll with TT. R207 contains a fragment possibly related to the piece. Publication: Soundings Press, 1982 / Schott, 1988.	R207	R049_Study37.MID (tempo 112 to 134)
R050	#38 Revisar grabación	Study No. 43 ALT	Early version of Study No. 43. Original title: Study No. 38. Title on roll: "Revisar grabación" written by Carlos Sandoval. Roll with TT. Roll with many corrections.	R059 R164 R095 R193 R206	R050_Study43_ALT.MID (tempo 176)
R051	38 (c) "RR"	Study No. 35 ALT Fragment	Fragment of an early version of Study No. 35 (last sections). Title in roll: "RR" in foreign hand. Roll with TT.	R047 R125 R173 R178 R188 R211 R218 R220	R051_Study35_ALT_F.MID (tempo 120)
R052	39a	Study No. 48a ALT Fragment	Fragment of an early version of Study No. 48a (up to system 37). Original title: Study No. 39a. Roll with TT.	R053 R068 R069 R149 R177 R199 R200 R210 R221 R222	R052_Study48a_ALT_F.MID (tempo 160)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R053	39b	Study No. 48b ALT Fragment	Fragment of an early version of Study No. 48b (up to system 37). Original title: Study No. 39b. Roll with TT. Transposition of R052. Related to: - Study No. 48a - Study No. 48c (No. 48a + No. 48b)	R052 R068 R069 R149 R177 R199 R200 R210 R221 R222	R053_Study48b_ALT_F.MID (tempo 160)
R054	[38] #40a e/ π	Study No. 40a	Definitive version of Study No. 40a. Duration indication on roll box: 4:20 Roll without TT. The roll is a copy from R055 with corrections. Related to: - Study No. 40b (R054 + R055, played together in canon) Publication: Soundings Press, 1977 / Schott, 1988.	R055	R054_Study40a.MID (tempo 210)
R055	[#38] 40 b e/ π	Study No. 40b	Definitive version of Study No. 40b (to be played together in canon with Study #40a) Duration on roll: 4:00 Roll with TT. Related to: - Study No. 40a Publication: Soundings Press, 1977 / Schott, 1988.	R054	R055_Study40b.MID (tempo 225)
R056	41 [B] a $1/\sqrt{\pi}$ / $\sqrt{2/3}$	Study No. 41a	Definitive version of Study No. 41a. Duration indication on roll: 7:40 Roll with TT. R293 contains an alternative version of the piece. R214 contains a fragment of an alternative version of the piece. Related to: - Study No. 41b - Study No. 41c for two player pianos (No. 41a + No. 41b) Publication: Soundings Press, 1981 / Schott, 1988.	R057 R214 R293	R056_Study41a.MID (tempo 175)
R057	41 [a] b $1/\sqrt[3]{\pi}$ / $\sqrt[3]{3/16}$	Study No. 41b	Definitive version of Study No. 41b. Duration indication on roll: 6:10 Duration indication on roll box: 5:50 Roll with TT. R292 contains an alternative version of the piece. Related to: - Study No. 41a - Study No. 41c for two player pianos (No. 41a + No. 41b) Publication: Soundings Press, 1981 / Schott, 1988.	R056 R214 R292 R293	R057_Study41b.MID (tempo 200)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R058	42	Study No. 42	Definitive version of Study No. 42. Duration indication on roll: 6:25 Duration indication on roll box: 6:40 Roll with TT. Related to: Suite with three parts assembled by Nancarrow in 1986 (PSS, photocopy): Studies for Player Piano I. Introduction, Tempo Fantasy (Moderato) [corresponds with Study No. 42] II. Interlude, Three Improvisations (Allegro, Andante, Allegro) [corresponds with Study No. 45] III. Finale, Three Canons with Tempo-Relations 4/5/6 (Allegro, Andante, Molto Allegro) [corresponds with Study No. 49]	--	R058_Study42.MID (tempo 80)
R059	[38a] 43 (24/25)	Study No. 43	Definitive version of Study No. 43. Original title: Study No. 38 Duration indication on roll: 6:20 Roll with TT. R164 contains the last section of Study No. 43 (copy of R059?) R050 contains an early complete version of the piece. R193 and R206 contain fragments of alternative versions of the piece. R095 contains an unidentified fragment with a possible relation to Study No. 43.	R050 R164 R095 R193 R206	R059_Study43.MID (tempo 176)
R060	44 A (low)	Study No. 44a	Definitive version of Study No. 44a for two player pianos (Aleatoric Round / Canon), lower part. Duration indication on roll: 8:40 Roll with TT. R099 contains a fragment possibly related to the piece. Related to: Study No. 44b	R061 R099	R060_Study44a.MID (tempo 110)
R061	44 B (high)	Study No. 44b	Definitive version of Study No. 44b for two player pianos (Aleatoric Round / Canon), higher part. Duration indication on roll: 7:30 Roll with TT. R099 contains a fragment possibly related to the piece. Related to: Study No. 44a	R060 R099	R061_Study44b.MID (tempo 127)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R062	45 a	Study No. 45a	<p>Definitive version of Study No. 45a (Study No. 45, Mov. 1).</p> <p>Duration indication on roll: 3:20 Roll with TT.</p> <p>The roll had originally an additional transitional section leading to Study No. Study No. 45d (Betty Freeman Suite). Roll is cut at this point.</p> <p>Related to:</p> <ul style="list-style-type: none"> - Original affiliation with Studies No. 46, 45b, 45d, 47 as part of the Betty Freeman Suite, Mov. 3. - Definitive affiliation with Studies No. 45b and 45c (Study No. 45) - Suite with three parts assembled by Nancarrow in 1986 (PSS, photocopy): <ul style="list-style-type: none"> Studies for Player Piano I. Introduction, Tempo Fantasy (Moderato) [corresponds with Study No. 42] II. Interlude, Three Improvisations (Allegro, Andante, Allegro) [corresponds with Study No. 45] III. Finale, Three Canons with Tempo-Relations 4/5/6 (Allegro, Andante, Molto Allegro) [corresponds with Study No. 49] 	R063 R064 R065 R066 R067 R102 R119 R163 R189 R253	R062_Study45a.MID (tempo 148)
R063	45b	Study No. 45b	<p>Definitive version of Study No. 45b (Study No. 45, Mov. 2).</p> <p>Duration indication on roll: 4:40 Roll with TT.</p> <p>Related to:</p> <ul style="list-style-type: none"> - Original affiliation with Studies No. 46, 45a, 45d, 47 as part of the Betty Freeman Suite, Mov. 2. - Definitive affiliation with Studies No. 45a and 45c (Study No. 45) - Suite with three parts assembled by Nancarrow in 1986 (PSS, photocopy): <ul style="list-style-type: none"> Studies for Player Piano I. Introduction, Tempo Fantasy (Moderato) [corresponds with Study No. 42] II. Interlude, Three Improvisations (Allegro, Andante, Allegro) [corresponds with Study No. 45] III. Finale, Three Canons with Tempo-Relations 4/5/6 (Allegro, Andante, Molto Allegro) [corresponds with Study No. 49] 	R062 R064 R065 R066 R067 R102 R163 R189 R253	R063_Study45b.MID (tempo 110)
R064	#45c	Study No. 45c	<p>Definitive version of Study No. 45c (Study No. 45, Mov. 3).</p> <p>Duration indication on roll: 6:40 Roll with TT.</p> <p>Related to:</p> <ul style="list-style-type: none"> - Studies No. 45a and 45b (Study No. 45). - Suite with three parts assembled by Nancarrow in 1986 (PSS, photocopy): <ul style="list-style-type: none"> Studies for Player Piano I. Introduction, Tempo Fantasy (Moderato) [corresponds with Study No. 42] II. Interlude, Three Improvisations (Allegro, Andante, Allegro) [corresponds with Study No. 45] III. Finale, Three Canons with Tempo-Relations 4/5/6 (Allegro, Andante, Molto Allegro) [corresponds with Study No. 49] 	R062 R063 R065 R066 R067 R102 R163 R189 R253	R064_Study45c.MID (tempo 150)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R065	#45d	Study No. 45d	Definitive version of Study No. 45d. Duration indication on roll: 4:20 Roll with TT. Related to: - Original affiliation with Studies No. 46, 45b, 45a, and 47 as part of the Betty Freeman Suite, Mov. 4	R062 R063 R064 R066 R067 R102 R163 R189 R253	R065_Study45d.MID (tempo 130)
R066	#46	Study No. 46	Definitive version of Study No. 46. Title on Roll: Erased number under “#46”. Duration indication on roll: 3:20 Roll with TT. R121 contains 2 sketches related to the piece. MIDI files: R066 is captured in two continuous MIDI files: R066A and R066B Related to: Original affiliation with Studies No. 45b, 45a, 45d, 47 as part of the Betty Freeman Suite, Mov. 1	R062 R063 R064 R065 R067 R102 R121 R163 R189	R066A_Study46_Part1.MID R066B_Study46_Part2.MID (tempo 170)
R067	47 [e]	Study No. 47	Definitive version of Study No. 47. Title on Roll: Erased number under “47” in the title. Duration indication on roll: 5:30 Roll with TT. Related to: Original affiliation with Studies No. 46, 45b, 45a, and 45d as part of the Betty Freeman Suite, Mov. 5 Publication: Music Theory Online, 2014	R062 R063 R064 R065 R066 R102 R163 R189	R067_Study47.MID (tempo 200)
R068	[39a] 47a 60/61	Study No. 48a	Definitive version of Study No. 48a. Original title: Study No. 39a. Duration indication on roll: 6:10 Duration indication on roll box: 6:15 Roll with TT. R052, R149, R177, and R210 contain fragments of alternative versions of the piece. R199 contains a fragment related to the piece. R222 is a copy of the beginning of this roll. Related to: - Study No. 48b - Study No. 48c (No. 48a + No. 48b) Publication: Schott (in preparation).	R052 R053 R069 R149 R177 R199 R200 R210 R221 R222	R068_Study48a.MID (tempo 130)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R069	39b 48 60/61	Study No. 48b	<p>Definitive version of Study No. 48b. Original title: Study No. 39b.</p> <p>Duration indication on roll: 6:10 Duration indication on roll box: 6:00 Roll with TT.</p> <p>R053 contains a fragment of an alternative version of the piece. R199 contains a fragment related to the piece.</p> <p>Related to: - Study No. 48a - Study No. 48c (No. 48a + No. 48b)</p> <p>Publication: Schott (in preparation).</p>	R052 R053 R068 R069 R149 R177 R199 R200 R210 R221 R222	R069_Study48b.MID (tempo 135)
R070	#49 A (canon 3/ 4/ 5)	Study No. 49a	<p>Definitive version of Study No. 49a (Study No. 49, Mov. 1).</p> <p>Duration indication on roll: 1:40 Roll with TT.</p> <p>Related to: - Suite with three parts assembled by Nancarrow in 1986 (PSS, photocopy): Studies for Player Piano I. Introduction, Tempo Fantasy (Moderato) [corresponds with Study No. 42] II. Interlude, Three Improvisations (Allegro, Andante, Allegro) [corresponds with Study No. 45] III. Finale, Three Canons with Tempo-Relations 4/5/6 (Allegro, Andante, Molto Allegro) [corresponds with Study No. 49] - Concerto for Pianola (unfinished)</p> <p>Publication: Schott (in preparation).</p>	R071 R072 R103 R111 R112 R113 R124 R165 R217	R070_Study49a.MID (tempo 130)
R071	49 b (canon 4/ 5/ 6)	Study No. 49b	<p>Definitive version of Study No. 49b (Study No. 49, Mov. 2).</p> <p>Duration indication on roll: 2:40 Roll with TT.</p> <p>R024 contains a fragment of an alternative version of the piece.</p> <p>Related to: - Suite with three parts assembled by Nancarrow in 1986 (Photocopy, PSS): Studies for Player Piano I. Introduction, Tempo Fantasy (Moderato) [corresponds with Study No. 42] II. Interlude, Three Improvisations (Allegro, Andante, Allegro) [corresponds with Study No. 45] III. Finale, Three Canons with Tempo-Relations 4/5/6 (Allegro, Andante, Molto Allegro) [corresponds with Study No. 49] - Study for Orchestra (1991), arr. Studies No. 49b and 49c for piano, computer-controlled piano, and orchestra by Carlos Sandoval (MS photocopy, PSS, Elliott Carter Collection) - Concerto for Pianola (unfinished).</p> <p>Publication: Schott (in preparation).</p>	R070 R072 R103 R111 R112 R113 R124 R165 R217	R071_Study49b.MID (tempo 130)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R072	49 c (canon 4/ 5/ 6)	Study No. 49c	<p>Definitive version of Study No. 49c (Study No. 49, Mov. 3).</p> <p>Duration indication on roll: 3:10 Roll with TT.</p> <p>Related to: - Suite with three parts assembled by Nancarrow in 1986 (PSS, photocopy): <ul style="list-style-type: none"> Studies for Player Piano I. Introduction, Tempo Fantasy (Moderato) [corresponds with Study No. 42] II. Interlude, Three Improvisations (Allegro, Andante, Allegro) [corresponds with Study No. 45] III. Finale, Three Canons with Tempo-Relations 4/5/6 (Allegro, Andante, Molto Allegro) [corresponds with Study No. 49] </p> <p>- Study for Orchestra (1991), arr. Studies No. 49b and 49c for piano, computer-controlled piano, and orchestra by Carlos Sandoval (MS photocopy, PSS, Elliott Carter Collection)</p> <p>- Concerto for Pianola (unfinished)</p> <p>Publication: Schott (in preparation).</p>	R070 R071 R103 R111 R112 R113 R124 R165 R217	R072_Study49c.MID (tempo 130)
R073	#50	Study No. 50	<p>Definitive version of Study No. 50.</p> <p>Title on roll box: "#50 (extract from Piece for S. O.) (canon 5/7)" Duration indication on roll: 4:20 Roll with TT.</p> <p>Related to: Piece No. 2 for Small Orchestra (Smith Publications, 1988).</p> <p>Publication: Schott (in preparation).</p>	--	R073_Study50.MID (tempo 130)
R074	Study #3750	Study No. 51	<p>Definitive version of Study No. 51.</p> <p>Title on roll: written by Carlos Sandoval. Roll annotated and punched by Carlos Sandoval. No duration indication on roll. Roll with TT.</p>	--	R074_Study51.MID (tempo 130)
R075	Tango	Tango	<p>Player piano version of Tango?</p> <p>Duration indication on roll: 2:40 Roll with TT.</p> <p>Related to: Tango? for piano (Smith Publications, 1990).</p>	--	R075_Tango.MID (tempo 160)
R076	18 Unknown finished B	Study No. 18 ALT	<p>Alternative version of Study No. 18 (posterior)</p> <p>Title on Roll: "Unknown finished B," in foreign hand. Roll with TT. Recording of the roll published by Wergo under the title "Study No. 18, second version" (WER 67542, 2012).</p> <p>Related to: - Study No. 18 (Soundings Press, 1985 / Schott 1988)</p>	R027	R076_Study18_ALT.MID (tempo 160)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R077	Unknown Finish 1	String Quartet No. 3 Mov. 3, part 1 and Three Movements for Chamber Orchestra Mov. 3	Player piano version of String Quartet No. 3, Mov. 3, part 1 and of the Three Movements for Chamber Orchestra, Mov. 3. Title on roll: written by Carlos Sandoval. Roll with TT. Roll with annotations by Nancarrow and by Carlos Sandoval. At the end of the roll, there are some notes punched and covered which correspond with the beginning of R087 (continuation of the String Quartet movement). Recording of the roll published by Wergo under the title "Unnumbered Study 3:4:5:6" (WER 67542, 2012) R150 and R198 contain sketches related to the piece. Related to: - String Quartet No. 3, Mov. 3 (1987) (Smith Publications, 1990) - Three Movements for Chamber Orchestra, Mov. 3 (1993) (Schott, 1993–arr. Thomas Adès).	R085 R086 R087 R150 R198	R077_SQ3_Mov3_Part1.MID (tempo 160)
R078	Blues	Blues	Player piano version of Blues. Duration indication on roll: 3:00 Roll with TT. The roll is re-used, it has many template drawings unrelated to the piece. Related to: Blues for piano (<i>New Music</i> 11, No. 2, 1938 / Smith Publications, 1992).	--	R078_Blues.MID (tempo 120)
R079	Prelude	Prelude	Player piano version of Prelude. Duration indication on roll: 1:05 Roll with TT. The articulations in the roll differ partially from the piano version. Related to: Prelude for piano (<i>New Music</i> 11, No. 2, 1938 / Smith Publications, 1992).	--	R079_Prelude.MID (tempo 100)
R080	Toccata Bösendorfer [95] 86	Toccata	Player piano version of the piano part of Toccata. Title on roll: "Bösendorfer [95] 86" written by Jürgen Hocker. Duration indication on roll: 1:30 Roll with TT. Related to: Toccata for violin and piano (<i>New Music</i> 11, No. 2, 1938 / Smith Publications, 1992).	--	R080_Toccata.MID (tempo 180)
R081	Son. I	Sonatina Mov. 1	Player piano version of Sonatina, Mov. 1. Duration indication on roll box: 1:05 Roll without TT. Detailed use of articulations in the roll. Related to: Sonatina for piano (Edition Peters, 1986).	R082 R083 R084 R202	R081_Sonatina_Mov1.MID (tempo 100)
R082	Son. II	Sonatina Mov. 2	Player piano version of Sonatina, Mov. 2. Duration indication on roll box: 1:35 Roll without TT. Detailed use of articulations in the roll. Related to: Sonatina for piano (Edition Peters, 1986).	R081 R083 R084 R202	R082_Sonatina_Mov2.MID (tempo 90)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R083	Son. III	Sonatina Mov. 3	Player piano version of Sonatina, Mov. 3. Duration indication on roll: 1:00 Roll without TT. Detailed use of articulations in the roll. R084 and R202 contain alternative versions of the piece. Related to: Sonatina for piano (Edition Peters, 1986).	R081 R082 R084 R202	R083_Sonatina_Mov3.MID (tempo 160)
R084	Son. 3	Sonatina Mov. 3 ALT	Alternative payer piano version of Sonatina, Mov. 3. Roll without TT. Articulations and dynamics different than in R083.	R081 R082 R083 R202	R084_Sonatina_Mov3_ALT.MID (tempo 160)
R085	Trilogie Part A	String Quartet No. 3 Mov. 2	Player piano version of String Quartet No. 3, Mov. 2. Title on roll: in foreign hand, probably written by Trimpin. Roll with TT. The corrections in the roll suggest that the roll preceded the String Quartet. Related to: String Quartet No. 3 (Smith Publications, 1990).	R077 R086 R087	R085_SQ3_Mov2.MID (tempo 130)
R086	B	String Quartet No. 3 Mov. 1	Player piano version of String Quartet No. 3, Mov. 1. Title on roll: in foreign hand, probably written by Trimpin. Roll with TT. The corrections in the roll suggest that the roll preceded the String Quartet. Related to: String Quartet No. 3 (Smith Publications, 1990).	R077 R085 R087	R086_SQ3_Mov1.MID (tempo 140)
R087	Trilogie Part C	String Quartet No. 3 Mov. 3, part 2	Player piano version of String Quartet No. 3, Mov. 3, part 2 (from measure 252 to the end). Title on roll: in foreign hand, probably written by Trimpin. Roll with TT. The corrections in the roll suggest that the roll preceded the String Quartet. R150 contain sketches related to the piece. Related to: String Quartet No. 3 (Smith Publications, 1990).	R077 R085 R086 R150	R087_SQ3_Mov3_Part2.MID (tempo 160)
R088	Para Yoko	Para Yoko	Definitive version of Para Yoko (1991) Roll with TT. Roll predominantly annotated by Carlos Sandoval.	--	R088_ParaYoko.MID (tempo 130)
R089	HELLO	HELLO	HELLO (word shape perforated in the roll). Title on roll: in foreign hand, probably written by Carlos Sandoval. Roll without TT.	--	R089_HELLO.MID (tempo 130)
R090	(b) unfinished "E"	Study No. 20 Fragment	Fragment of Study No. 20 (beginning). Title on Roll: in foreign hand. Number annotations in the roll written by Carlos Sandoval. Roll with TT. Roll manufactured at a later stage than the original R029.	R029	R090_Study20_F.MID (tempo 140)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R091	"HH"	Study No. 30 ALT INC	Incomplete alternative version of Study No. 30 for prepared player piano. Title on Roll: "HH" in foreign hand. Roll with TT. Roll suddenly cut before reaching the end.	R042	R091_Study30_ALT_INC.MID (tempo 200)
R092	v2/2 p. 2 "II"	Study No. 33 ALT Fragment	Fragment of an early version of Study No. 33, part 2. Roll with many corrections and extra material erased. It begins at page 24 of the published score and proceeds to the end. Title on Roll: "II" in foreign hand. Roll with TT.	R045	R092_Study33_ALT_F.MID (tempo 194)
R093	"W"	Study No. 34 ALT	Early version of Study No. 34. Title on Roll: in foreign hand. Roll with TT.	R046 R180	R093_Study34_ALT.MID (tempo 130)
R094	[Q]	Fragment (NI)	Rhythmic permutation of four chromatic notes in the middle register. Few long notes in the bass. Title on Roll: in foreign hand. Roll with TT.	--	R094_F_NI.MID (tempo 130)
R095	II	Fragment (NI)	Canon 24/25, possible relation to Study No. 43. Roll with TT.	R050 R059 R193 R206	R095_F_NI.MID (tempo 130)
R096	--	Fragment (NI)	Early fragment, accompanied melody. Title on roll: erased. Roll without TT. Possible relation with R098.	R098	R096_F_NI.MID (tempo 130)
R097	R.S. 15 P. 25, 26 "WW"	Sketches (NI)	Two rhythmic sketches with two adjacent notes (C and D flat), accelerando and ritardando. Possible relation with Study No. 21. Title on roll: "R.S." stands for Rhythmic Study. "WW" in foreign hand. Roll with TT.	R030	R097_S_NI.MID (tempo 130)
R098	B "LL"	Fragment (NI)	Early fragment, long. Title on roll: "LL" in foreign hand. Roll without TT. Possible relation with R096.	R096	R098_F_NI.MID (tempo 130)
R099	"Z" [26] [44B] [Marked]	Fragment (NI)	<i>Staccato</i> bass, <i>staccato</i> thirds in middle register, upper legato melody. Possible relation with Study No. 44. Title on roll: "Z" in foreign hand. Roll with TT.	R060 R061	R099_F_NI.MID (tempo 130)
R100	--	Sketches (NI)	Three sketches with trills and repeated notes in different tempos. Roll with TT.	--	R100_S_NI.MID (tempo 130)
R101	b	Fragment (NI)	Short fragment, accompanied melody. Roll with TT.	--	R101_F_NI.MID (tempo 130)
R102	47a "CC"	Fragment (NI)	Triads in middle register, melodic octaves in bass. Possible relation with Study No. 47. Title on roll: "CC" in foreign hand. Roll with TT.	R067	R102_F_NI.MID (tempo 130)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R103	(b)	Concerto for Pianola Fragment	Player piano version of a fragment related to the Concerto for Pianola (unfinished) with material from Study No. 49c. Roll with TT. Related to: Study No. 49c	R070 R071 R072 R111 R112 R113 R214 R165 R217	R103_ConcetoForPianola_F.MID (tempo 130)
R104	--	Sketch (NI)	Sketch with sustained notes in the treble and <i>staccato</i> notes in the bass. Chords based on perfect fourths and tritones. Roll with TT.	--	R104_S_NI_.MID (tempo 140)
R105	s.q. I	String Quartet No. 1 Mov. 1 ALT	Player piano version of the String Quartet No. 1, Mov. 1. Duration indication on roll box: 1:45 Roll without TT. Many differences with the Quartet. Related to: String Quartet No. 1 (Smith Publications, 1986).	R106	R105_SQ1_Mov1_ALT.MID (tempo 120)
R106	S.Q. (P. 3) [R.S. 33]	String Quartet No. 1 Mov. 3 ALT	Player piano version of the String Quartet No. 1, Mov. 3. Duration indication on roll box: 3:00 Roll without TT. Many differences with the Quartet. Related to: String Quartet No. 1 (Smith Publications, 1986).	R105	R106_SQ1_Mov3_ALT.MID (tempo 110)
R107	#23	Study No. 23 IC	Play Rite industrial copy of R032. Roll without TT.	R032 R033 R186 R114 R115 R116	R107_Stud#23_IC.MID (tempo 215)
R108	#24	Study No. 24 IC	Play Rite industrial copy of R034. Duration indication on roll: 4:00 Roll without TT.	R033 R034 R035	--
R109	[#3 discard] [46] Blank	Sketch (NI)	Melodic sketch in middle register. Roll with TT.	--	R109_S_NI.MID (tempo 140)
R110	C.S. III	Piece R110 (NI) INC	Unknown early jazzy Study, incomplete. Roll without TT. R166 and R173 contain fragments related to the piece.	R166 R173	R110_Piece_NI_INC.MID (tempo 96)
R111	38d 2 "FF" No terminado	Concerto for Pianola Fragment	Player piano version of a fragment related to the Concerto for Pianola (unfinished). The main theme from Study No. 49a appears at the end for the fragment, preceded by tremolos. Title on roll: "FF" in foreign hand. "No terminado" written by Carlos Sandoval. Roll with TT. R111 corresponds with a punching score MS with instrumentation annotations related to the Concerto for Pianola (PSS). R113 is the continuation of R111. Related to: Study No. 49a	R070 R071 R072 R103 R111 R112 R113 R124 R165 R217	R111_ConcetoForPianola_F.MID (tempo 130)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R112	--	Concerto for Pianola Fragment	Player piano version of a fragment related to the Concerto for Pianola (unfinished). Canonic texture in five layers plus bass. Roll with TT. The roll corresponds with MSS associated with the documents of Study No. 49 (PSS) and with the Concerto for Pianola. Related to: Study No. 49.	R070 R071 R072 R103 R111 R113 R124 R165 R217	R112_ConcertoForPianola_F.MID (tempo 130)
R113	[cont] blank	Concerto for Pianola Fragment	Player piano version of a fragment related to the Concerto for Pianola (unfinished). The main theme of Study No. 49a is presented in canon with added tremolos. Roll with TT. R113 corresponds with a punching score MS with instrumentation annotations related to the Concerto for Pianola (PSS). R113 is the continuation from R111. Related to: Study No. 49a	R070 R071 R072 R103 R111 R112 R113 R124 R165 R217	R113_ConcertoForPianola_F.MID (tempo 130)
R114	--	Sketches (NI)	Fast figures / gestures. Possibly related to Study No. 23. Roll with TT. R115 and R116 contain similar sketches.	R032 R033 R107 R115 R116 R120 R186	R114_S_NI.MID (tempo 130)
R115	[A2 A2-B2] [2]	Sketches (NI)	Fast Figures / gestures. Possibly related to Study No. 23. Roll with TT. R114 and R116 contain similar sketches.	R032 R033 R107 R114 R116 R120 R186	R115_S_NI.MID (tempo 130)
R116	--	Sketches (NI)	Figures / gestures. Possibly related to Study No. 23. Roll with TT. R114 and R115 contain similar sketches.	R032 R033 R107 R114 R115 R120 R186	R116_S_NI.MID (tempo 130)
R117	--	Sketches (NI)	Two sketches. Permutation of three notes in middle register. Jumping bass. Roll with TT.	--	R117_S_NI.MID (tempo 130)
R118	--	Fragment (NI)	Short fragment. Full texture with three layers: upper melody, middle triads, <i>staccato</i> bass. Roll with TT.	--	R118_F_NI.MID (tempo 130)
R119	--	Study No. 29 ALT Fragment	Long fragment of an alternative version of Study No. 29 (end). Roll with TT. The roll is cut at the beginning. Events in the roll numbered between 44 and 100. Some of the tempo-template drawings in the roll are related to R062 (Study No. 45a).	R041 R169 R212	R119_Study29_ALT_F.MID (tempo 230)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R120	--	Fragment (NI)	Melody harmonized with thirds. <i>Staccato</i> thirds in middle register. Jumping bass. Fragment related to Study No. 23. Roll with TT.	R032 R033 R107 R186 R114 R115 R116	R120_F_NI.MID (tempo 215)
R121	38 c fin	Study No. 46 Sketches	2 sketches related to Study No. 46. Roll with TT.	R066	R121_Study46_S.MID (tempo 170)
R122	"VV"	Sketch (NI)	Complex rhythmic texture in middle register (C4 to C5) Title on roll: in foreign hand. Roll with TT.	--	R122_S_NI.MID (tempo 130)
R123	--	Fragment (NI)	Short fragment with <i>staccato</i> attacks. Single notes in bass, minor thirds in middle register. Roll with TT.	--	R123_F_NI.MID (tempo 130)
R124	Con. D 1	Concerto for Pianola Fragment	Player piano version of a fragment related to the Concerto for Pianola (unfinished) with material from Study No. 49b. Roll with TT. Roll punched until system 12, templates marked until system 17. Related to: Study No. 49b	R070 R071 R072 R103 R111 R112 R113 R165 R217	R124_ConcertoForPianola_F.MID (tempo 130)
R125	a unknown finished C	Study No. 35 ALT Fragment	Fragment of an alternative version of Study No. 35. Title on roll: "Unknown finished C" written by Carlos Sandoval. Roll with TT. Roll annotations by Nancarrow and Carlos Sandoval.	R047 R051 R173 R178 R188 R211 R218 R220	R125_Study35_ALT_F.MID (tempo 164)
R126	k	Fragment (NI)	Early fragment. <i>Staccato</i> attacks in all registers. Title on roll: "k" in foreign hand. Roll without TT. Old paper in the roll. Single dynamic throughout.	--	R126_F_NI.MID (tempo 200)
R127	51 R	Fragments (NI)	Two fragments with tremolo textures. Roll with TT. R136 and R187 contain similar material.	R136 R187	R127_F_NI.MID (tempo 160)
R128	29 fin	Sketches (NI)	Melodic sketch and sketches of motives in different speeds. Roll with TT.	--	R128_S_NI.MID (tempo 130)
R129	34 b	Fragment (NI)	Short fragment, <i>staccato</i> accompaniment. Roll with TT.	--	R129_F_NI.MID (tempo 130)
R130	a – 23 "u"	Fragment (NI)	Fragment with triadic <i>staccato</i> chords and <i>staccato</i> octaves in the bass. Title on roll: "u" in foreign hand. Roll with TT.	--	R130_F_NI.MID (tempo 130)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R131	65 A VIII unfinished "G"	Fragment (NI)	Fragment with repeated notes. Possibly for prepared piano. Title on roll: "unfinished "G"" in foreign hand. Roll with TT. R132 contains similar material.	R132 R143	R131_F_NI.MID (tempo 160)
R132	--	Fragment (NI)	Short fragment with repeated notes. Possibly for prepared piano. Roll with TT. R131 contains similar material.	R131 R143	R132_F_NI.MID (tempo 160)
R133	AR "SS"	Fragment (NI)	Texture with six layers, general <i>crescendo</i> and <i>accelerando</i> . Chromatic trills at different pitch levels (octaves). Fast arpeggios punctuate de texture. Title on roll: "SS" in foreign hand. Roll with TT.	--	R133_F_NI.MID (tempo 130)
R134	--	Fragment (NI)	Short fragment. <i>Staccato</i> bass, melody ornamented with arpeggios, triads. Roll with TT.	--	R134_F_NI.MID (tempo 130)
R135	"PP"	Fragment (NI)	Octaves in different registers and of different lengths. Octaves ornamented with arpeggios and scales. Title on roll: "PP" in foreign hand. Roll with TT.	--	R135_F_NI.MID (tempo 100)
R136	--	Fragments (NI)	Three fragments. Trills and tremolos, repeated notes, bass ascending figures and <i>staccato</i> dyads in middle register. Roll with TT. R127 and R187 contain similar material.	R127 R187	R136_F_NI.MID (tempo 160)
R137	"Q"	Fragment (NI)	Substantial fragment of an early unknown piece. Folklore Latin America. Title on roll: "Q" in foreign hand. Roll without TT.	--	R137_F_NI.MID (tempo 140)
R138	fin	Fragment (NI)	Fragment with sustained intervals in upper register. Roll with TT.	--	R138_F_NI.MID (tempo 140)
R139	--	Fragment (NI)	Short fragment. Ascending groups of three notes in the bass. Alternation of C and D flat in middle register. Roll with TT.	--	R139_F_NI.MID (tempo 180)
R140	B.W. 3 "GG"	Study No. 3e ALT	Early version of Study No. 3e (Study No. 3, Mov. 5). Main difference with the definitive version (R012): octave duplications. Title on roll: "B.W." stands for Boogie Woogie. "GG" in foreign hand. Roll punched with different proportions as R012. Roll without TT.	R012	R140_Study3e_ALT.MID (tempo 216)
R141	R.S. II "KK"	Study No. 2a ALT	Early version of Study No. 2a. Main differences with the definitive version (R002): octave duplications, dynamics. Title on roll: "R.S." stands for Rhythmic Study. "KK" written in foreign hand. Roll punched with different proportions as R002. Roll without TT.	R002 R004 R005 R006	R141_Study2a_ALT.MID (tempo 74)
R142	5/6/7/8	Study No. 32 ALT	Alternative version of Study No. 32. Roll with TT.	R044	R142_Study32_ALT.MID (tempo 160)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R143	65 B	Fragment (NI)	Early long fragment with repeated notes. Possibly conceived for prepared piano or percussion orchestra. Roll with TT.	R131 R132	R143_F_NI.MID (tempo 130)
R144	20 y "AAA"	Fragment (NI)	Accumulation texture. Title on roll: "AAA" in foreign hand. Roll with TT.	--	R144_F_NI.MID (tempo 130)
R145	39 g "AA"	Three Movements for Chamber Orchestra Mov. 2	Player piano version of Three Movements for Chamber Orchestra, Mov. 2. Title on roll: "AA" in foreign hand. Roll with TT. Roll annotated by Carlos Sandoval. R156 and R162 contain fragments related to this Mov. Related to: Three Movements for Chamber Orchestra (1993) (Schott, 1993–arr. Thomas Adès).	R077 R147 R150 R152 R154 R155 R156 R162 R171	R145_ThreeMovements_Mov2.MID (tempo 160)
R146	Var. (P. 3)	Variation X INC	Incomplete version of Variation X for player piano. Roll without TT. R003 is related to Variation II R011 is related to Variation VI Related to: Variations (MS, PSS). Early work for player piano, partially missing.	R003 R011	R146_VariationX_IN C.MID (tempo 130)
R147	46 b 1	Three Movements for Chamber Orchestra Mov. 1	Player piano version of Three Movements for Chamber Orchestra, Mov. 1. Title on roll: additional heading annotations written by Carlos Sandoval: "Tempo: orange line per second (Player piano tempo: ca. 83)." Roll annotated by Carlos Sandoval. Roll with TT. Five voices, each with one C (C2–C6) R171 contains the same material with different roll dynamics (roll without TT) R152, R154, R155 contain material related to this Mov. Related to: Three Movements for Chamber Orchestra (1993) (Schott, 1993–arr. Thomas Adès).	R077 R145 R150 R152 R154 R155 R156 R162 R171	R147_ThreeMovements_Mov1.MID (tempo 130)
R148	--	Fragment (NI)	Short fragment. Fast gestures in middle/upper register with reference trill between F6 and Gb6. Roll with TT. Fragment begins at system 34.	--	R148_F_NI.MID (tempo 160)
R149	--	Study No. 48a ALT Fragment	Fragment of an early version of Study 48a. Roll begins at system 17. Original title: Study No. 39a. Roll with TT.	R052 R053 R068 R069 R177 R210 R221 R222	R149_Study48a_ALT_F.MID (tempo 130)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R150	--	Three Movements for Chamber Orchestra Mov. 3 Sketches	Sketches for Three Movements for Chamber Orchestra, Mov. 3. Roll with TT.	R077 R198	R150_ThreeMovements_Mov3_S.MID (tempo 160)
R151	--	Study No. 27 Fragment ALT	Fragment of an alternative version of Study No. 27 (systems 112–140). Roll with TT. Roll cut at the beginning.	R038 R039 R151 R213	R151_Study27_ALT_F.MID (tempo 200)
R152	46 a 1	Three Movements for Chamber Orchestra Mov. 1 Sketch	Sketch related to Three Movements for Chamber Orchestra, Mov. 1. Roll with TT. One voice, one note (C4) R154 and R267 contain a different rhythm. R155 contains the same rhythm.	R147 R154 R155 R156 R171 R267	R152_ThreeMovements_Mov1_S.MID (tempo 130)
R153	[38] [[40]] marked	Fragments (NI)	Two fragments. Octaves in the bass, thirds and single notes in middle register. <i>Staccato</i> attacks. Roll with TT.	--	R153_F_NI.MID (tempo 120)
R154	1 B C 5	Three Movements for Chamber Orchestra Mov. 1 Sketch	Sketch related to Three Movements for Chamber Orchestra, Mov. 1. Roll without TT. One voice, one note (C4). Possibly conceived originally for a percussion orchestra operated through the player piano. R152 and R155 contain a different rhythm. R267 contains the same rhythm.	R147 R152 R155 R156 R171 R267	R154_ThreeMovements_Mov1_S.MID (tempo 130)
R155	46 a 2	Three Movements for Chamber Orchestra Mov. 1 Sketch	Sketch related to Three Movements for Chamber Orchestra, Mov. 1. Roll without TT. One voice, one note (C4). Possibly conceived originally for a percussion orchestra operated through the player piano. R152 contains the same rhythm. R154 and R267 contain a different rhythm.	R147 R152 R154 R156 R171 R267	R155_ThreeMovements_Mov1_S.MID (tempo 130)
R156	--	Three Movements for Chamber Orchestra Mov. 2 ALT Fragment	Fragment related to Three Movements for Chamber Orchestra, Mov. 2 Roll without TT.	R145 R162	R156_ThreeMovements_Mov2_ALT_F.MID (tempo 160)
R157	"XX"	Sketches (NI)	Three notes in the high register in alternation. Word "ENDE" perforated at the end. Title on roll: in foreign hand. Roll with TT.	--	R157_S_NI.MID (tempo 130)
R158	[A 25]	Sketches (NI)	Patterns with variations, using different dynamics. Roll with TT.	--	R158_S_NI.MID (tempo 130)
R159	--	Sketches (NI)	Accompaniment patterns. Roll with TT.	--	R159_S_NI.MID (tempo 160)
R160	51 c	Fragment (NI)	Fragment on the low register. Rhythmic pattern with fixed notes. Roll with TT	--	R160_F_NI.MID (tempo 160)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R161	T. – 3 (d)	Sketch (NI)	Short sketch. Repeated note (Eb4) in different dynamics. Roll without TT.	--	R161_S_NI.MID (tempo 130)
R162	34 c [9/10/11]	Three Movements for Chamber Orchestra Mov. 2 ALT Fragment	Short fragment related to Three Movements for Chamber Orchestra, Mov. 2 Roll with TT. Cut at the beginning of the roll, after the title.	R145 R156	R162_ThreeMovements_Mov2_ALT_F.MID (tempo 160)
R163	2 a	Studies No. 45-47 Sketches	Sketches with F15 templates. Roll with TT. The F15 templates contain of an irregular rhythm of 15 attacks. The rhythm is repeated cyclically and appears in different sizes. This template is associated with Studies No. 45, 46, and 47.	R062 R063 R064 R065 R066 R067 R102	R163_Studies45-47_S.MID (tempo 110)
R164	--	Study No. 43 Fragment	Fragment containing the last section of Study No. 43. Roll without TT (copy of R059?). Fragment representing systems 79–102.	R059 R050 R095 R193 R206	R164_Study43_F.MID (tempo 176)
R165	Con. A 6 [41 A]	Concerto for Pianola Fragment	Player piano version of a fragment related to the Concerto for Pianola (unfinished) with material from Study No. 49b. Roll with TT. MIDI files: Roll recorded in two different MIDI files, to be played continuously. Related to: Study No. 49b	R070 R071 R072 R103 R111 R112 R113 R124 R217	R165A_ConcertoForPianola_F.MID R165B_ConcertoForPianola_F.MID (tempo 130)
R166	38 d "j"	Piece R110 (NI) ALT Fragment	Fragment related to the piece in R110 Title on roll: "j" in foreign hand. Roll without TT.	R110 R173	R166_PieceR110_ALT_F.MID (tempo 96)
R167	Con A [17/18/19/20]	Sketches (NI)	Two sketches partially punched. Roll with TT.	--	R167_S_NI.MID (tempo 130)
R168	UNFIN. 1 "O"	Fragment (NI)	Fragment in low register only. Title on roll: "UNFIN. 1" written by Carlos Sandoval. "O" in foreign hand. Roll with TT. R175 shows similar contents.	R175	R168_F_NI.MID (tempo 130)
R169	29 a	Study No. 29 ALT Fragment	Fragment of an early version of Study No. 29 (systems 1–37, up to event No. 26). Very different from the definitive version (R041). Roll with TT.	R041 R119 R212	R169_Study29_ALT_F.MID (tempo 230)
R 170	25 – X	Sketches (NI)	Two sketches. Roll with TT.	--	R170_S_NI.MID (tempo 130)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R171	46 b ² "R" Perc.	Three Movements for Chamber Orchestra Mov. 1	Player piano version of Three Movements for Chamber Orchestra, Mov. 1. Title on roll: "'R' Perc." In foreign hand. Roll without TT. Five voices, each with one C (C2–C6). Possibly conceived originally for a percussion orchestra operated through the player piano. R147 contains the same material with different roll dynamics (roll with TT). Related to: Three Movements for Chamber Orchestra (1993) (Schott, 1993–arr. Thomas Adès).	R147 R152 R154 R155 R156	R171_ThreeMovements_Mov1.MID (tempo 130)
R172	"UU"	Fragment and Sketches (NI)	One fragment and two sketches. Textures and gestures. Title on roll: "UU" in foreign hand. Roll with TT.	--	R172_F_NI_AND_S_NI.MID (tempo 130)
R173	--	Study No. 35 ALT Fragment and Piece (NI) R110 ALT Fragments	Fragments related to Study No. 35 and to the Piece in R110. Roll without TT.	R047 R051 R110 R125 R178 R188 R211 R218 R220	R173_Study35_ALT_F_AND_PieceR110_ALT_F.MID (tempos 120 and 96)
R174	--	Fragments (NI)	Two fragments of bass material, possibly related to Study No. 45. Roll with TT.	--	R174_F_NI.MID (tempo 130)
R175	1	Fragment (NI)	Fragment in low register only. Roll with TT. R168 shows similar contents.	R168	R175_F_NI.MID (tempo 130)
R176	"DD" No terminado	Fragment (NI)	Fragment including a three-voice canon Title on roll: "DD" in foreign hand. "No terminado" written by Carlos Sandoval. Roll with TT.	--	R176_F_NI.MID (tempo 160)
R177	--	Study No. 48 ALT Fragment	Fragment of an early version of Study 48. Original Title: Study No. 39. Roll with TT. Roll begins with musical contents directly.	R052 R053 R068 R069 R149 R210 R221 R222	R177_Study48_ALT_F.MID (tempo 130)
R178	C "QQ"	Study No. 35 ALT Fragment	Fragment of an alternative version of Study No. 35 (middle section). Title on roll: "QQ" in foreign hand. Roll with TT.	R047 R051 R125 R173 R188 R211 R218 R220	R178_Study35_ALT_F.MID (tempo 120)
R179	--	Piece R179 (NI) INC?	Early unknown Study, incomplete? Complex and experimental (also in the use of dynamics and pedals) Roll without TT.	--	R179_Piece_NI.MID (tempo 96)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R180	"NN"	Study No. 34 ALT INC	Early version of Study No. 34, incomplete. Title on roll: "NN" in foreign hand. Roll with TT.	R046 R093	R180_Study34_ALT_INC.MID (tempo 130)
R181	"XX"	Sketch (NI)	Rhythmic pattern with three chromatic notes in middle register. Title on roll: "XX" in foreign hand. Roll with TT.	--	R181_S_NI.MID (tempo 130)
R182	"EE" No terminado	Fragment (NI)	Melody in middle/low register, imitated in canon, with <i>staccato</i> bass. Title on roll: "EE" in foreign hand. "No terminado" written by Carlos Sandoval. Roll with TT. Roll punched up to system 12. Template drawings continue up to system 19.	--	R182_F_NI.MID (tempo 180)
R183	1/32 beg.	Fragment (NI)	Very short fragment. <i>Staccato</i> melody ornamented with arpeggios. Roll with TT.	--	R183_F_NI.MID (tempo 130)
R184	--	Sketch (NI)	MS markings	--	--
R185	[38] [1/2 marked]	Fragment (NI)	Accompanied melody. Roll with TT. Roll punched until system 7.		R185_F_NI.MID (tempo 130)
R186	"MM" 17	Study No. 23 ALT	Early version of Study No. 23. Title on roll: "MM" in foreign hand. Roll with TT.	R032 R107 R114 R115 R116	R186_Study23_ALT.MID (tempo 215)
R187	"ZZ"	Fragment (NI)	Tremolos in different registers. Title on roll: "ZZ" in foreign hand. Roll without TT. R127 and R136 contain similar material.	R127 R136	R187_F_NI.MID (tempo 160)
R188	29 P	Fragment (NI)	Short fragment, not identified. Possible relation with Study No. 35. Roll with TT.	R047 R051 R125 R173 R178 R188 R211 R218 R220	R188_F_NI.MID (tempo 130)
R189	(g)	Sketches (NI)	Two sketches. Melodic sketch in middle register. Bass accompaniment sketch. Roll with TT. The used templates hint at a possible relation with Studies No 45–47.	--	R189_S_NI.MID (tempo 130)
R190	--	Sketches (NI)	Five sketches. Rhythmic pattern with three notes in high register. Accompaniment in broken octaves. Melodic descending gesture. Roll with TT.	--	R190_S_NI.MID (tempo 130)
R191	EVA SOLTES & ASSOCIATES P.O. Box 7266 Berkeley CA NANCARROW #31	Study No. 31 IC	Play Rite industrial copy of R043. Title on roll: "EVA SOLTES & ASSOCIATES" stamp. "NANCARROW #31" in foreign hand. Roll without TT.	R043	--

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R192	"S"	Fragment (NI)	Fragment in low/middle register, all <i>staccato</i> attacks. Title on roll: "S" in foreign hand. Roll with TT. Roll with some corrections.	--	R192_F_NI.MID (tempo 120)
R193	--	Study No. 43 ALT Fragment	Fragment from an early version of Study No. 43. Original title: Study No. 38. Fragment begins at page 31 of the published score. Roll with TT.	R050 R059 R095 R164 R206	R193_Study43_ALT_F.MID (tempo 176)
R194	51 P	Fragment (NI)	Fragment in low-middle register. Accompaniment. Roll with TT. Roll punched until system 10.	--	R194_F_NI.MID (tempo 130)
R195	[a] "TT"	Sketches (NI)	Two sketches in middle-high register. Textures. Title on roll: "TT" in foreign hand. Roll with TT.	--	R195_S_NI.MID (tempo 130)
R196	a, 6'	Fragment (NI)	<i>Staccato</i> texture in middle register punctuated with trills. Roll with TT.	R197	R196_F_NI.MID (tempo 130)
R197	41 B	Fragment (NI)	Fragment with chordal trills. Title on roll: no detected relation with Study No. 41b. Roll with TT.	R196	R197_F_NI.MID (tempo 130)
R198	Blank	Three Movements for Chamber Orchestra Mov. 3 Sketch	Sketch of accompaniment pattern related to the Three Movements for Chamber Orchestra, Movement 3. Roll with TT.	R077 R150	R198_ThreeMovements_Mov3_S.MID (tempo 160)
R199	--	Study No. 48 ALT Fragment	Short fragment related to Study No. 48. Original title: Study No. 39. Roll with TT.	R052 R053 R068 R069 R149 R177 R200 R210 R221 R222	R199_Study48_ALT_F.MID (tempo 130)
R200	--	Study No. 48 ALT Fragment	Very short fragment related to Study No. 48 (end). Original title: Study No. 39. Roll with TT.	R052 R053 R068 R069 R149 R177 R199 R210 R221 R222	R200_Study48_ALT_F.MID (tempo 130)
R201	C.S. "V"	Fragment (NI)	Fragment from an early piece. Title on roll: "V" in foreign hand. Roll without TT.	--	R201_F_NI.MID (tempo 130)
R202	--	Sonatina Mov. 3 ALT	Alternative player piano version of Sonatina, Mov. 3. Roll without TT Possibly a copy, some holes are not fully punched. Articulations and dynamics different than in R083.	R081 R082 R083 R084	R202_Sonatina_Mov3_ALT.MID (tempo 160)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R203	--	Fragment (NI)	Very short fragment with quadruple octaves and a trill in the bass. Roll with corrections. Roll with TT.	--	R203_F_NI.MID (tempo 130)
R204	--	Fragment (NI)	Short melodic fragment. Roll with TT.	--	R204_F_NI.MID (tempo 130)
R205	--	Study No. 36 ALT Fragment	Short fragment from an early version of Study No. 36. Roll with TT.	R048 R236	R205_Study36_ALT_ F.MID (tempo 180)
R206	--	Study No. 43 Fragment	Fragment of Study No. 43. Original title: Study No. 38. Roll with TT.	R050 R059 R095 R164 R193	R206_Study43_F.MI D (tempo 176)
R207	--	Sketches (NI)	Sketches possibly related with Study No. 37. Roll with TT.	R049	R207_S_NI.MID (tempo 130)
R208	F3-F#3-G3 5	Fragment (NI)	Short fragment of an unknown piece (beginning). Title on roll: "F3-F#4-G3" does not correspond with contents. Roll with TT. Systems 1 to 4.	--	R208_F_NI.MID (tempo 130)
R209	--	Fragment (NI)	Short fragment. Ascending and descending fast scales and arpeggios. Systems 5 and 6. Roll with TT.	--	R209_F_NI.MID (tempo 130)
R210	[B]	Study No. 48a ALT Fragment	Short fragment of an early version of Study No. 48a. Similar to definitive version. Roll with TT.	R052 R053 R068 R069 R149 R177 R199 R200 R210 R221 R222	R210_Study48a_ALT_ F.MID
R211	--	Study No. 35 ALT Fragment	Short fragment of an alternative version of Study No. 35. Roll with TT.	R047 R051 R125 R173 R178 R188 R218 R220	R211_Study35_ALT_ F.MID (tempo 120)
R212	--	Study No. 29 ALT Fragment	Fragment of an alternative version of Study No. 29 (beginning until system 14). Roll with TT.	R041 R119 R169	R212_Study29_ALT_ F.MID (tempo 230)
R213	--	Study No. 27 Fragment	Fragment of Study No. 27, middle section (systems 105–108 of the final score). Roll with TT.	R038 R039 R151 R213	R213_Study27_F.MI D (tempo 200)
R214	--	Study No. 41a ALT Fragment	Fragment of an alternative version of Study #41a, beginning. Roll with TT	R056 R057 R197	R214_Study41a_ALT_ F.MID (tempo 175)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R215		Study No. 13 ALT Fragment	Fragment of an alternative version of Study No. 13, beginning. The length of the attacks is longer than in the definitive version (R022). Roll without TT.	R022	R215_Study13_ALT_F.MID (tempo 130)
R216	R.S.X	Study No. 10 Fragment	Original opening of Study No. 10. Title on roll: "R.S." stands for Rhythmic Study. Duration indication on roll: 2:55 Roll without TT. Sudden roll cut at the end of the fragment.	R019	R216_Study10_F.MID (tempo 130)
R217	--	Study No. 49c Fragment	Fragment of Study No. 49c (copy) Roll without TT.	R070 R071 R072 R103 R111 R112 R113 R165 R217	R217_Study49c_F.MID (tempo 130)
R218	--	Study No. 35 ALT Fragment	Fragment of an alternative version of the Study No. 35 (end). Roll with TT.	R047 R051 R125 R173 R178 R188 R211 R220	R218_Study35_ALT_F.MID (tempo 120)
R219	—	Fragments (NI)	Four fragments with different textures. Fast and complex music expanding the full register. Roll without TT.	--	R219_F_NI.MID (tempo 120)
R220	--	Study No. 35 ALT Fragment	Fragment of an alternative version of Study No. 35. Roll without TT.	R047 R051 R125 R173 R178 R188 R211 R218	R220_Study35_ALT_F.MID (tempo 120)
R221	--	Study No. 48b ALT Fragment	Copy of a fragment from an alternative version of Study No. 48b. Roll without TT.	R052 R053 R068 R069 R149 R177 R199 R200 R210 R221 R222	R221_Study48b_ALT_F.MID (tempo 130)
R222	--	Study No. 48a Fragment	Copy of a fragment from Study No. 48a, beginning. Original title: Study No. 39a. Roll without TT.	R052 R053 R068 R069 R149 R177 R199 R200 R210 R221	R222_Study48a_F.MID (tempo 130)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R223	Canon B Ur.	Three Canons for Ursula canon B	MS markings without perforations. Roll with TT. Related to: Three canons for Ursula (Two Canons: Boosey & Hawkes, 1992).	R224	--
R224	Canon C Ur.	Three Canons for Ursula canon C	MS markings without perforations. Roll with TT. Related to: Three canons for Ursula (Two Canons: Boosey & Hawkes, 1992).	R223	--
R225	--	Sketches (NI)	MS markings without perforations. Roll with TT.	--	--
R226	b + 1, 2, 3, 4	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R227	--	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R228	--	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R229	T4 - 4 ½ - 4 ¾ - 5 g-a-d-c	Blank roll	Title without contents.	--	--
R230	--	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R231	1.	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R232	--	Fragment (NI)	Texture with two layers in middle and low register. Roll with TT.	--	R232_F_NI.MID (tempo 130)
R233	[C5] [a2]	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R234		Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R235	C5 a ¹ 0-56	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R236	17/18/19/20, 2	Study No. 36 Sketches	MS markings without perforations related to Study No. 36. Roll with TT.	R048 R205	--
R237	a	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R238	(b) Blank	Sketch (NI)	MS markings without perforations. Title on roll: "Blank" in foreign hand. Roll with TT.	--	--

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R239	Blank	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R240	T- 4 ½ - 4 ¾ - 5 a-d-g	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R241	--	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R242	Blank	Sketch (NI)	MS markings without perforations. Title on roll: "Blank" in foreign hand. Roll with TT.	--	--
R243	39a	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R244	Con A (6) Blank	Sketch (NI)	MS markings without perforations. Title on roll: "Blank" in foreign hand.	--	--
R245	T- 4 ½ c	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R246	--	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R247	47a ₂	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R248	--	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R249	--	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R250	--	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R251	5	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R252	8	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R253	blank	Studies No. 45–47 Sketches	MS markings without perforations related to Studies No. 45-47. Roll with TT.	R063 R064 R065 R066 R067 R102 R119 R163 R189	--
R254	9	Sketch (NI)	MS markings without perforations. Roll with TT	--	--

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R255	1	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R256	--	Sketch (NI)	MS markings without perforations. Roll with TT	--	--
R257	3	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R258	2	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R259	10	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R260	6	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R261	--	Sketch (NI)	MS markings without perforations. Roll with TT.	--	--
R262	Tracker Tester	Test Roll	Sustain octave C1-C7. Roll without TT.	--	R262_T.MID (tempo 100)
R263	Entorchados (b)	Test Roll	Chromatic scales, bass register. Roll with TT.	--	R263_T.MID (tempo 130)
R264	Fin	Test Roll	Shifting figures (chromatic scales) Title on roll: "Fin" in foreign hand. Roll without TT.	--	R264_T.MID (tempo 130)
R265	Tester	Test Roll	Rhythmic triads in high register and <i>fortissimo</i> . Roll without TT.	--	R265_T.MID (tempo 130)
R266	Tracker T.	Test Roll	Octaves (C3, C4, C5) Title on roll: "T." stands for Tester. Roll without TT.	--	R266_T.MID (tempo 130)
R267	C5 IA [38 c] "BBB"	Three Movements for Chamber Orchestra Mov. 1 Sketch	Sketch related to Three Movements for Chamber Orchestra, Mov. 1. Title on roll: "BBB" in foreign hand. Roll with TT. One voice, one note (C4). R154 contains the same rhythm. R152 and R155 contain a different rhythm.	R147 R152 R154 R155 R156 R171	R267_ThreeMovements_Mov1_S.MID (tempo 130)
R268	83 n. <i>ff</i>	Test Roll	Note repetition. Title on roll: "n." stands for notes. Roll with annotations (note names) Roll without TT.	--	R268_T.MID (tempo 130)
R269	83 note str.	Test Roll	<i>Staccato</i> notes (punched as single holes), chromatic. Roll with annotations (note names) Roll without TT.	--	R269_T.MID (tempo 130)

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R270	Int.	Test Roll	Tester for player-piano intensities. Title on Roll: "Int." stand for Intensities. Roll with annotations (intensity levels). Roll without TT.	--	R270_T.MID (tempo 100)
R271	Tester	Test Roll	Tester for intensities, pedals, and other roll commands. Roll with annotations. Roll without TT.	--	R271_T.MID (tempo 130)
R272	unfinished "H"	Test Roll	C1 and C7 played simultaneously and held twice. Title on Roll: written in foreign hand. Roll without TT.	--	R272_T.MID (tempo 130)
R273	--	Test Roll	Soft pedal, high register. Roll without TT.	--	R273_T.MID
R274	Test 2-4-6	Test Roll	Test 2-4-6 (higher intensity) Roll without TT. MIDI file: Not scanned, damaged.	--	--
R275	83-note tester	Test Roll	Note repetition, pp. Roll with annotations (note names) Roll without TT.	--	R275_T.MID
R276	exp. – rep.	Test Roll	Intensities and repetition. Roll with annotations. Roll without TT.	--	R276_T.MID
R277	Tempo	Test Roll	Tempo tester. Roll with annotations. Roll without TT.	--	--
R278	Chro.triads	Test Roll	Chromatic triads, crescendo und decrescendo. Roll without TT.	--	R278_T.MID
R279	rep. <i>ff</i>	Test Roll	Repetition in <i>fortissimo</i> . Roll without TT.	--	R279_T.MID
R280	AMPICO A&B TEST ROLL No. T-2	Test Roll Ampico, manufactured by Play-Rite (CR)	Test Roll for service manual 1929.	--	--
R281	AMPICO 70403 TEST ROLL TEMPO 85	Test Roll manufactured by AMPICO (CR)	Test Rolls for service manual 1929.	--	--
R282	CHINAS POBLANAS FOX-TROT Por G. Coutiño	Chinas Poblanas Fox-Trot G. Coutiño (CR)	J.P.D.L.H. No. 11 (CR). Title on roll: printed label.	--	--
R283	Feliz Año Vals	Feliz año Vals I.M. del C. C.	J.P.D.L.H. No. 21 (CR). Title on roll: written in foreign hand.	--	--
R284	Felix Año Vals	Feliz año Vals I.M.del C. C.	J.P.D.L.H. No. 21 (CR). Title on roll: printed label.	--	--

ROLL NO.	TITLE ON ROLL	CONTENTS	REMARKS	RELATED ROLLS	MIDI FILES (suggested tempo)
R285	IN RE CON MOTO ET AL von Charles E. Ives	In Re Con Moto Et Al Charles E. Ives	Heisigrolle (CR). Title on roll: written in foreign hand.	--	--
R286	LIEBESLIED Kreisler- Rachmaninoff played by Sergei Rachmaninoff	Liebesleid Alt-Wiener Tanzweisen no. 2 Fritz Kreisler / Sergei Rachmaninoff	Ampico roll, 62103-H (CR). Title on roll: printed.	--	--
R287	--	Untitled Rex Lawson?	Dedication on roll: "To Yoko & Conlon with lots of love, Rex" [Lawson].	--	--
R288	Etude for Pianola	Etude for Pianola Igor Stravinsky	The Aeolian Company (CR). Title on roll, additional information: Full Scale Themodist T967 B	--	R288_Stravinsky_Et udeForPianola.MID (tempo 140)
R289	Las cuatro de la mañana Danza retro.	Las cuatro de la mañana Luis Amores (arr.?)	Las cuatro de la mañana (CR) Title on roll: written by Nancarrow. The roll is cut before the music begins.	--	--
R290	Chiapas Tango retro. Invert.	Chiapas Tango Luis Amores (arr.?)	Chiapas Tango (CR) Title on roll: written by Nancarrow. The roll is cut before the music begins.	--	--
R291	Piece for György Ligeti	For Ligeti	Definitive version of For Ligeti (1988). The piece is a revised and expanded version of the original Study No. 3 for player piano. Title on roll, additional annotations: "1988" and "Bösendorfer Tempo 70" written by Jürgen Hocker. Duration on roll: 5:00 Roll with TT. Related to: Original Study No. 3 for player piano (MS, PSS), later replaced with the definitive Study No. 3 in five movements (3a-e). Publication: Schott (in preparation).	--	R291_ForLigeti.MID (tempo 130)
R292	41A = 41b	Study No. 41b ALT	Alternative version of Study No. 41b. Title on roll: "= 41b" written by Jürgen Hocker. Roll heading contains additional annotations by Jürgen Hocker. Duration indication on roll: 6:30 Roll with TT. Roll annotated by Jürgen Hocker.	R056 R057 R214 R293	--
R293	[41A] 41B = 41a	Study No. 41a ALT	Alternative version of Study No. 41a. Title on roll: "= 41b" written by Jürgen Hocker. Roll heading contains additional annotations by Jürgen Hocker. Duration indication on roll: 7:15 Roll with TT. Roll annotated by Jürgen Hocker.	R056 R057 R214 R292	--