Title: Proposal to Normalize �田儿 as 鬼 for Radical #194

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Status: Individual Contribution to IRG #64

Action: For Consideration by IRG, China, TCA, ROK & UTC

I. Background Information

Among the known IDS (Ideographic Description Sequence) databases, several ideographs that include Radical #194 (鬼) have representative glyphs that use the 𖈽田儿 component. This leads to inconsistencies in their encoding because the 𖈽田儿 form does not accurately represent Radical #194.

The core objective of this proposal is to normalize the 𖈽田儿 component as Radical #194 (鬼) proper, thereby eliminating this non-standard form. By normalizing Radical #194, we ensure that all ideographs that use this Kangxi radical are represented consistently. This proposal follows the approach adopted by the UK in their submission for IRG Working Set 2024, specifically #00669 (aka UK-30394), which normalizes Radical #194 as 鬼.

II. Rationale for Normalizing 𖈽田儿 to Radical #194 (鬼)

This section provides the specific examples and justifications for normalizing 𖈽田儿 as Radical #194 (鬼), focusing on the inconsistencies caused by its current use, the historical context, and the need for normalization.

UCV#441 Rule and Its Importance

An important aspect of the normalization process that should not be overlooked is the inclusion of UCV#441, as outlined in [IRG N2680](#). This rule directly supports the normalization of 𦣝田儿 to 鬼 (Radical #194).

441	鬼 鬼 鬼 鬼 鬼 鬼 鬼 鬼 鬼 鬼 鬼 鬼	Level: 1 **Note** Only for etymological relation with 鬼(ghost). **Review System** https://hc.jsecs.org/irg/ws2017/app/index.php?id=04844

Figure 1: UCV#441 in IRG N2680 (from Page 173)

UCV#441 is a key rule in the UCS Ideograph Unifiable Component Variations List, and it is important to cite it here because if 𦣝田儿 is an etymologically related form of 鬼, then, according to this rule, it must be normalized, as it explicitly clarifies this relationship.

UK vs. TCA Approach: A Comparison from the Same Source

There is a clear contrast between how TCA and UK handle characters from the same source: the 《道法會元》. The evidence provided by TCA retains the 𦣝田儿 form, while UK has correctly normalized it to Radical #194 (鬼), reflecting the widely recognized and authoritative standard for encoding characters with this radical.

For example, T13-3F6A is represented with the 𦣝田儿 form (Figure 2). According to this proposal, it should be normalized as Radical #194 (鬼), in line with the UK submission, which uses the correct radical and aligns with UCV#441.

| 04296 | 194.0 鬼
▢▢田儿一
SC=1, FS=1 TS=8 | | | 鬽
T13-3F6A | | | |

(Reading: yī)
Note: Keep the original form

Info on CNS11643.gov.tw

Evidence 1

《道法會元》卷127〈九州社令陽雷大法〉8b,《正統道藏》涵芬樓版.

Attributes:

Char	SC	FS	TS
田 (U+7530)	5	2	5
儿 (U+513F)	2	3	2
一 (U+4E00)	1	1	1

	Expected	Recorded	
SC	/	1	Radical not found
FS	/	1	Radical not found
TS	8	8	OK

Note: expected counts are determined algorithmically from the given IDS and may be inaccurate in edge cases.

Figure 2: T13-3F6A with ▢田儿 form (from 《道法會元》)

In addition, the handling of TB-6362 is quite weird. Figure 3 shows the glyph ▢▢田儿午, which is evidence also from the same source 《道法會元》, but the representative glyph submitted in their form is ▢鬼午 instead. After the individual expert YUAN Zhiyu raised the question, "The glyph and IDS do not match (noticed by Fei Wu). Should the IDS be revised?", TCA then suggested changing the IDS to ▢鬼午. This also reflects the inconsistency in TCA's handling, as the same source is treated differently.
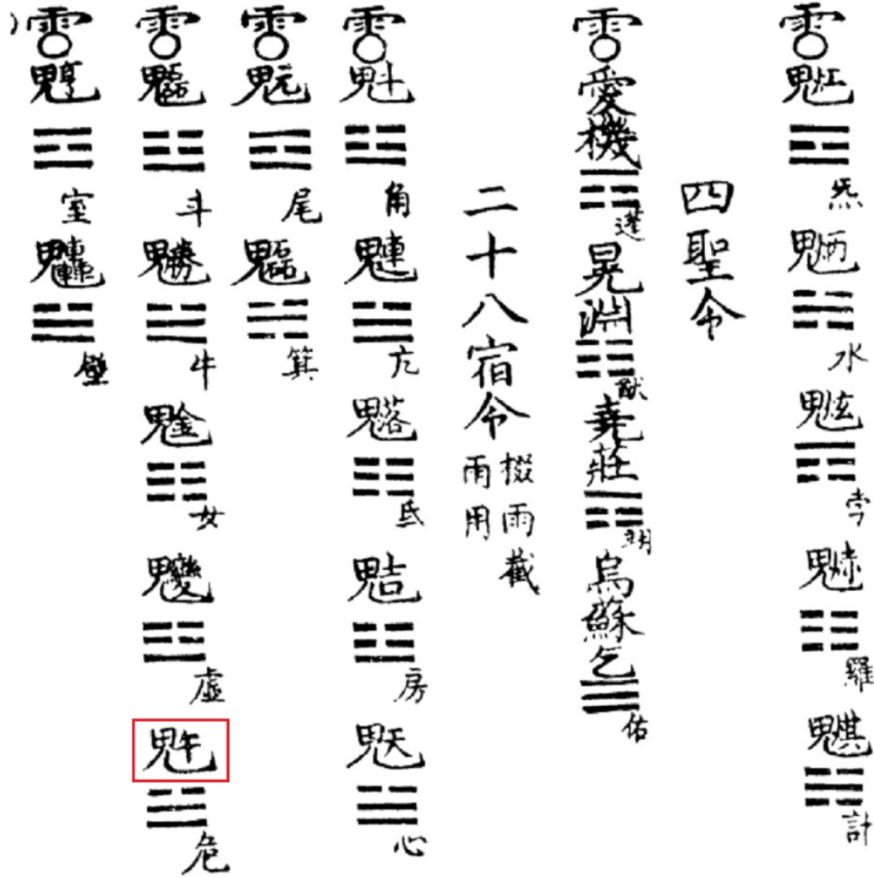
Figure 3: TB-6362 with 白田儿 form (from 《道法會元》)

The UK proposal has correctly normalized Radical #194 (鬼) by using Radical #194 (鬼) for characters that previously had the 白田儿 variant (Figure 3.1). The 白田儿 form has been eliminated, and all related characters are now uniformly represented under the correct radical. This demonstrates the correct approach to character encoding, in line with the principles established by the UK, and adheres to UCV#441 that supports the normalization of 白田儿 to 鬼 (Radical #194).

| 00669 | 30.0 口 ⿲口⿱鬼文 SC=14, FS=4 TS=17 | | | | 嘿 UK-30394 | | | |

Evidence 1

《正統道藏・道法會元》卷195

https://commons.wikimedia.org/w/index.php?title=File:NLC892-411999005947-9635_道藏_第4024冊.pdf&page=16
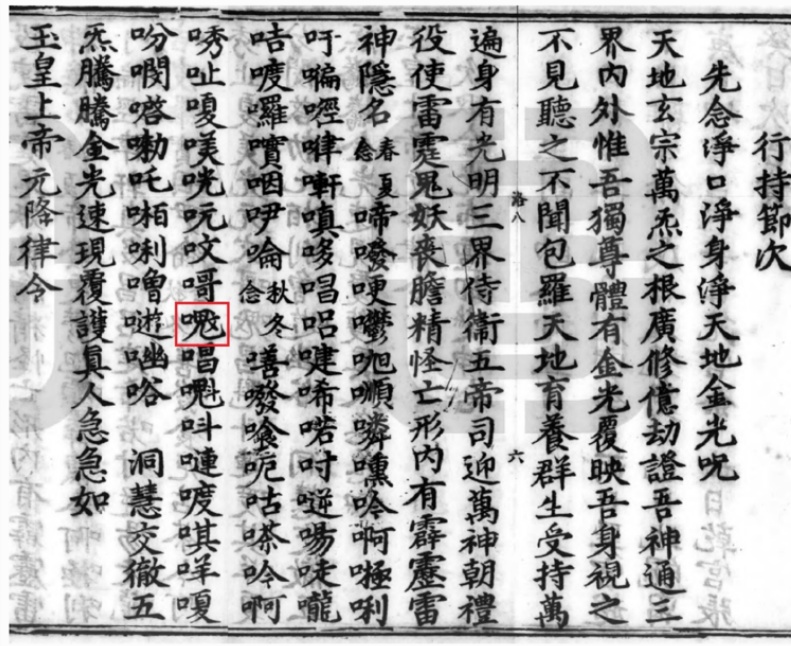
Attributes:

Char	SC	FS	TS
口 (U+53E3)	N/A	N/A	3
鬼 (U+9B3C)	10	3	10
文 (U+6587)	4	4	4

	Expected	Recorded	
SC	14	14	OK
FS	3	4	Mismatch
TS	17	17	OK

Note: expected counts are determined algorithmically from the given IDS and may be inaccurate in edge cases.

Figure 4.1: UK-30394 with ⿲⿱田儿 form (from 《道法會元》)

The Correct Standard: UK Submission

Figures 2 and 4.1 both display the ⿲⿱田儿 form, a non-standard variant from 《道法會元》. However, Figure 4.2 represents the printed version of the same page as Figure 4.1, where the radical is clearly shown as Radical #194 (鬼), not ⿲⿱田儿. In the printed version, relevant experts considered the character's meaning and chose '鬼' as the correct radical, also providing strong supportive evidence for normalizing it. The UK submission, recognizing UCV#441 and this point, correctly normalizes the ⿲⿱田儿 to Radical #194 (鬼).

By using Radical #194 (鬼) consistently across all related characters, the UK submission demonstrates respect for the established rules. The ⿲⿱田儿 form is a non-standard variation and

does not represent the radical in the most widely recognized form. Therefore, all characters submitted under the ⿱田儿 variant should be normalized under the standard Radical #194 (鬼), in line with UCV#441, which emphasizes that ⿱田儿 should be normalized to 鬼 (Radical #194).

Figure 4.2: UK-30394 with 鬼 form (from 《中華道藏》)

III. Examples of Affected Characters

This section lists affected ideographs under UCV#441, covering unencoded ideographs in IRG Working Set 2024, already encoded ideographs requiring updates from UTC and Japan, and specific ideographs that require updates also under ROK normalization rules.

List of Affected Characters in IRG Working Set 2024

In IRG Working Set 2024, 67 ideographs include ⿱田儿 as a component, which should be normalized to Radical #194 (鬼). These characters have not yet been encoded and should be updated by TCA. A full list of the affected ideographs is provided in the Appendix.

Encoded Ideographs Exhibiting the Issue

In addition to the ideographs in IRG Working Set 2024 that are yet to be encoded, several already encoded ideographs exhibit the same issue. These ideographs contain 􀀀田儿 as a component, which needs to be normalized to Radical #194 (鬼) in accordance with UCV#441. The following are examples of ideographs that should be updated:

- **U+4C27 魧 (UTC-00237, submitted by UTC)**

  The IDS for U+4C27 魧 includes the component 􀀀鬼虎 in several sources, such as G3-7A3F (G source), T4-5E7C (T source), and others. However, the U-source representative glyph includes 􀀀田儿 as a component, while all the other representative glyphs do not. In line with UCV#441, which dictates that 􀀀田儿 should be normalized to 鬼 (Radical #194), it is reasonable to recommend that the UTC update the U-source representative glyph for U+4C27 魧 from 􀀀􀀀田儿虎 to 􀀀鬼虎.

- **U+28884 醨 (T7-3460, VN-28884, submitted by TCA & Vietnam)**

  The case of U+28884 醨 is particularly challenging because normalizing it under UCV#441 would result in a duplicate encoding issue with U+919C 醜. Both characters would share the same radical form, which could lead to confusion and redundancy in encoding.

  This issue highlights the importance of historical encoding decisions that did not always strictly adhere to normalization standards. While we should aim to correct these inconsistencies moving forward, in this case, normalization is clearly impractical and unrealistic. Attempting to enforce it retroactively would only introduce further complications without offering a viable solution. Instead of repeating past mistakes, future encoding efforts must be far more rigorous in avoiding such conflicts from the outset, ensuring that normalization principles are consistently and correctly applied.

ROK Normalization Rules

For ideographs submitted by ROK, there are several cases where the IDS includes 田儿, but according to ROK Normalization Rules, these should be normalized to 鬼 (Radical #194). The following examples require updates:

- U+2AF51 鬽 (K5-016E, submitted by ROK)

  The IDS contains the component 田儿. According to UCV#441 and ROK Normalization Rule 164-8, the 田儿 should be normalized to 鬼. However, if normalized to 鬼, U+2AF51 鬽 would duplicate U+29C8D 魍—an issue similar to that of U+28884 醜, which once again reminds us to avoid such duplicate encoding conflicts.

- U+2EAE2 鬽 (KC-07180, submitted by ROK)

  The IDS contains the component 田儿. According to UCV#441 and ROK Normalization Rule 164-8, the 田儿 should be normalized to 鬼.

- U+2EAE7 魖 (KC-05932, submitted by ROK)

  The IDS contains the component 田儿. According to UCV#441 and ROK Normalization Rule 164-4, the 田儿 should be normalized to 鬼.

- U+2D84F 攬 (KC-06293, submitted by ROK)

  The IDS contains the component 田儿. According to UCV#441 and ROK Normalization Rule 164-6, the 田儿 should be normalized to 鬼.

prim. rule number (Norm. comp. shape)	rule number (prim. rule no. - sec. rule no.)	Variant component shape	Evidences, examples, source	comments
	163-4	丸	染-染[A050:27d:4(甲)] 軌-軌[A012:372a:2(鮮2)]	※ refer to the UCV_N249
	163-5	阷	染-桨[B080:099d:2(乙)]	
164 (鬼)	164-1	鬼	鬼-鬼[A041:027c:10(丁)]	
	164-2	鬼	鬼-鬼[B073:198c:9]	
	164-3	鬼	鬼-鬼[B073:198d:1]	
	164-4	鬼	鬼-鬼[B084:204a:5(丙)]	
	164-5	鬼	鬼-鬼[B113:441b:7(19後)]	
	164-6	鬼	鬼-鬼[A273:6a:3(丙)]	
	164-7	鬼	鬼-鬼[A058:359c:8(乙)]	
	164-8	鬼	黿-鬼[B082:384b:6(乙)]	

k2427_161_part1_KR_Normn_Rules_V1.6_20231201(001-200)_155pp.hwp   - 125 -   125/347

Figure 5: ROK Normalization Rule ([IRG N2573](#), Page 125)

As noted in <u>IRG N2476_KR_Resp1</u>, ROK has stated that, in general, IRG should not attempt to apply UCV or KR normalization rules to already existing UCS characters, though exceptions may exist. Based on this stance, ROK has decided not to modify the glyph for U+2D84F 拽 under its current rules. While UCV#441 requires normalization to 鬼, this decision raises concerns about consistency, especially as two other ideographs, U+2AF51 胼 and U+2EAE2 魆, were not explicitly mentioned by ROK but are likely to remain unmodified based on the same reasoning.

Nevertheless, to promote consistency and long-term stability in character encoding, I strongly recommend that ROK reconsider this position. Aligning with UCV#441 would enhance standardization and interoperability, reducing the risk of discrepancies in future extensions. Given the importance of maintaining a unified encoding framework, revisiting this decision would contribute to a more coherent system, benefiting all stakeholders in the long run.

Side Note on U+2D84F 拽

As concluded in WS2021-01496, U+2D84F 拽 (KC-06293) was unified with 扌鬼 (GZ-2132401), and the latter was not encoded separately due to their exact match. However, if ROK continues to refrain from adopting UCV#441-based normalization and remains unwilling to update the glyph for U+2D84F 拽, it is suggested that China perform a horizontal extension of U+2D84F 拽 using 扌鬼. This would accommodate users who wish to follow UCV#441 without forcing a modification that ROK opposes.

IV.   Proposal for Unihan Database Updates

The following updates should be made to the Unihan database for the affected ideographs if the corresponding normalization is accepted:

- **U+2EAE2 魆 (KC-07180)**
    - kRSUnicode: 194.8 (no change)

- kTotalStrokes: 15 → 18
- **U+2D84F 挸 (KC-06293)**
  - kRSUnicode: 64.8 → 64.9
  - kTotalStrokes: 13 → 14

V. Conclusion and Actions for Parties Involved

This proposal outlines the steps needed to normalize characters with Radical #194 (鬼) and eliminate the ▢田儿 form. The actions required are as follows:

- TCA should confirm the normalization of affected ideographs in the IRG Working Set 2024 and update all relevant character representations accordingly.
- UTC should confirm the update of representative glyphs for the ideograph U+4C27 鰦.
- ROK should confirm the normalization of affected ideographs such as U+2EAE2 黀, U+2EAE7 鸍 and U+2D84F 挸.
- China should confirm the horizontal extension of U+2D84F 挸 using ▢扌 鬼 whether ROK updates the corresponding representative glyph or not.
- Unihan Database should update the relevant properties listed in the Section IV above if the normalization has been accepted in the future.

Acknowledgement

Appendix

No.	Source Ref.	Evidence Name	Current IDS	Current Glyph
1	T13-3F6A	《道法會元》卷 127〈九州社令陽雷大法〉8b,《正統道藏》涵芬樓版.	⿱⿱田儿一	鬾 T13-3F6A
2	T13-4023	《道法會元》卷 254〈東嶽溫太保考召秘法〉3a,《正統道藏》涵芬樓版.	⿱⿱田儿俞	魩 T13-4023
3	T13-4046	《道法會元》卷 127〈九州社令陽雷大法〉8b,《正統道藏》涵芬樓版.	⿱⿱田儿億	魡 T13-4046
4	T13-4024	《道法會元》卷 254〈東嶽溫太保考召秘法〉3a,《正統道藏》涵芬樓版.	⿱⿱田儿兹	魀 T13-4024
5	T13-3F7D	《道法會元》卷 127〈九州社令陽雷大法〉8b,《正統道藏》涵芬樓版.	⿱⿱田儿制	魝 T13-3F7D
6	T13-4029	《道法會元》卷 112〈帝令寶珠五雷祈禱大法〉3b,《正統道藏》涵芬樓版.	⿱⿱田儿勑	魩 T13-4029
7	TB-6362	《道法會元》卷 112〈帝令寶珠五雷祈禱大法〉3a,《正統道藏》涵芬樓版.	⿱⿱田儿午	鬽 TB-6362
8	T13-3F70	《道法會元》卷 257〈東平張元帥秘法〉10b,《正統道藏》涵芬樓版.	⿱⿱田儿右	鬿 T13-3F70
9	T13-3F72	《道法會元》卷 170〈混天飛捉四聖伏魔大法〉3b,《正統道藏》涵芬樓版.	⿱⿱田儿向	魁 T13-3F72

10	T13-4031	《道法會元》卷 257〈東平張元帥秘法〉10b,《正統道藏》涵芬樓版.	□日田儿執	魀 T13-4031
11	T13-3F6C	《道法會元》卷 254〈東嶽溫太保考召秘法〉3a,《正統道藏》涵芬樓版.	□日田儿太	魌 T13-3F6C
12	T13-3F6D	《道法會元》卷 83〈先天雷晶隱書〉9a-9b,《正統道藏》涵芬樓版.	□日田儿孔	魌 T13-3F6D
13	T13-3F74	《道法會元》卷 254〈東嶽溫太保考召秘法〉13b,《正統道藏》涵芬樓版.	□日田儿安	魘 T13-3F74
14	T13-3F7E	《道法會元》卷 254〈東嶽溫太保考召秘法〉13b,《正統道藏》涵芬樓版.	□日田儿定	魘 T13-3F7E
15	T13-4042	《道法會元》卷 83〈先天雷晶隱書〉9a-9b,《正統道藏》涵芬樓版.	□日田儿對	魕 T13-4042
16	T13-4021	《道法會元》卷 112〈帝令寶珠五雷祈禱大法〉2b,《正統道藏》涵芬樓版.	□日田儿幸	魕 T13-4021
17	T13-4033	《道法會元》卷 127〈九州社令陽雷大法〉9a,《正統道藏》涵芬樓版.	□日田儿張	魕 T13-4033
18	T13-4025	《道法會元》卷 127〈九州社令陽雷大法〉9b,《正統道藏》涵芬樓版.	□日田儿律	魕 T13-4025

19	T13-3F78	《道法會元》卷 254〈東嶽溫太保考召秘法〉14a,《正統道藏》涵芬樓版.	□□田儿志	魊 T13-3F78
20	T13-3F79	《道法會元》卷 170〈混天飛捉四聖伏魔大法〉3a,《正統道藏》涵芬樓版.	□□田儿折	魤 T13-3F79
21	T13-3F6F	《道法會元》卷 170〈混天飛捉四聖伏魔大法〉3b,《正統道藏》涵芬樓版。	□□田儿日	魌 T13-3F6F
22	T13-4038	《道法會元》卷83〈先天雷晶隱書〉9a-9b,《正統道藏》涵芬樓版.	□□田儿景	魒 T13-4038
23	T13-4039	《道法會元》卷67〈雷霆玄論〉28b,《正統道藏》涵芬樓版.	□□田儿晶	魒 T13-4039
24	T13-4041	《道法會元》卷127〈九州社令陽雷大法〉9a,《正統道藏》涵芬樓版.	□□田儿暉	魒 T13-4041
25	T13-3F75	《道法會元》卷112〈帝令寶珠五雷祈禱大法〉2b,《正統道藏》涵芬樓版.	□□田儿曲	魖 T13-3F75
26	T13-402A	《道法會元》卷112〈帝令寶珠五雷祈禱大法〉2b,《正統道藏》涵芬樓版.	□□田儿胹	魒 T13-402A
27	T13-403A	《道法會元》卷127〈九州社令陽雷大法〉9b,《正統道藏》涵芬樓版.	□□田儿淼	魒 T13-403A

28	T13-404F	《道法會元》卷127〈九州社令陽雷大法〉8a-8b,《正統道藏》涵芬樓版.	□□田儿灝	魖 T13-404F
29	T13-3F7A	《道法會元》卷112〈帝令寶珠五雷祈禱大法〉3a,《正統道藏》涵芬樓版.	□□田儿灯	魌 T13-3F7A
30	T13-3F7B	《道法會元》卷127〈九州社令陽雷大法〉9b,《正統道藏》涵芬樓版.	□□田儿灼	魌 T13-3F7B
31	T13-4026	《道法會元》卷112〈帝令寶珠五雷祈禱大法〉3a,《正統道藏》涵芬樓版.	□□田儿炫	魌 T13-4026
32	T13-4027	《道法會元》卷112〈帝令寶珠五雷祈禱大法〉3a,《正統道藏》涵芬樓版.	□□田儿炳	魌 T13-4027
33	T13-402B	《道法會元》卷 112〈帝令寶珠五雷祈禱大法〉2b,《正統道藏》涵芬樓版.	□□田儿烘	魌 T13-402B
34	T13-402C	《道法會元》卷112〈帝令寶珠五雷祈禱大法〉2b,《正統道藏》涵芬樓版.	□□田儿烜	魌 T13-402C
35	T13-402D	《道法會元》卷112〈帝令寶珠五雷祈禱大法〉2b,《正統道藏》涵芬樓版.	□□田儿烟	魌 T13-402D
36	T13-404B	《道法會元》卷127〈九州社令陽雷大法〉9b,《正統道藏》涵芬樓版.	□□田儿爍	魌 T13-404B

37	T13-3F71	《道法會元》卷170〈混天飛捉四聖伏魔大法〉3a,《正統道藏》涵芬樓版.	☐☐田儿玉	魃 T13-3F71
38	T13-404C	《道法會元》卷170〈混天飛捉四聖伏魔大法〉3a,《正統道藏》涵芬樓版.	☐☐田儿瓊	魙 T13-404C
39	T13-4048	《道法會元》卷112〈帝令寶珠五雷祈禱大法〉3b,《正統道藏》涵芬樓版.	☐☐田儿皇	魌 T13-4028
40	T13-4048	《道法會元》卷112〈帝令寶珠五雷祈禱大法〉3b,《正統道藏》涵芬樓版.	☐☐田儿確	魌 T13-4048
41	T13-4044	《道法會元》卷112〈帝令寶珠五雷祈禱大法〉2b,《正統道藏》涵芬樓版.	☐☐田儿精	魈 T13-4044
42	T13-4034	《道法會元》卷127〈九州社令陽雷大法〉8a,《正統道藏》涵芬樓版.	☐☐田儿絃	魀 T13-4034
43	T13-4045	《道法會元》卷112〈帝令寶珠五雷祈禱大法〉3b,《正統道藏》涵芬樓版.	☐☐田儿緊	魕 T13-4045
44	T13-402E	《道法會元》卷127〈九州社令陽雷大法〉8a,《正統道藏》涵芬樓版.	☐☐田儿舀	魋 T13-402E
45	T13-403B	《道法會元》卷83〈先天雷晶隱書〉9a-9b,《正統道藏》涵芬樓版.	☐☐田儿華	魆 T13-403B

46	T13-3F76	《道法會元》卷118〈太極都雷隱書〉25b,《正統道藏》涵芬樓版.	□日田儿虫	魖 T13-3F76
47	T13-402F	《道法會元》卷127〈九州社令陽雷大法〉7b,《正統道藏》涵芬樓版.	□日田儿蚓	魖 T13-402F
48	T13-4049	《道法會元》卷 127〈九州社令陽雷大法〉8a,《正統道藏》涵芬樓版.	□日田儿融	魖 T13-4049
49	T13-404D	《道法會元》卷127〈九州社令陽雷大法〉8b,《正統道藏》涵芬樓版.	□日田儿識	魖 T13-404D
50	T13-403C	《道法會元》卷170〈混天飛捉四聖伏魔大法〉3a,《正統道藏》涵芬樓版.	□日田儿軸	魖 T13-403C
51	T13-3F7C	《道法會元》卷254〈東嶽溫太保考召秘法〉3a,《正統道藏》涵芬樓版.	□日田儿辛	魖 T13-3F7C
52	T13-404A	《道法會元》卷112〈帝令寶珠五雷祈禱大法〉4a,《正統道藏》涵芬樓版.	□日田儿醜	魖 T13-404A
53	T13-4047	《道法會元》卷112〈帝令寶珠五雷祈禱大法〉3b,《正統道藏》涵芬樓版.	□日田儿震	魖 T13-4047
54	T13-4022	《道法會元》卷112〈帝令寶珠五雷祈禱大法〉2b,《正統道藏》涵芬樓版.	□日田儿青	魖 T13-4022

55	T13-403D	《道法會元》卷112〈帝令寶珠五雷祈禱大法〉3b,《正統道藏》涵芬樓版.	□日田儿項	魈 T13-403D
56	T13-404E	《道法會元》卷127〈九州社令陽雷大法〉8b,《正統道藏》涵芬樓版.	□日田儿囆	魖 T13-404E
57	T13-4032	《道法會元》卷127〈九州社令陽雷大法〉8b,《正統道藏》涵芬樓版.	□日田儿婁	魖 T13-4032
58	T13-403E	《道法會元》卷112〈帝令寶珠五雷祈禱大法〉3a,《正統道藏》涵芬樓版.	□日田儿淇	魖 T13-403E
59	T13-4030	《道法會元》卷67〈雷霆玄論〉28b,《正統道藏》涵芬樓版.	□日田儿斜	魖 T13-4030
60	T13-403F	《道法會元》卷112〈帝令寶珠五雷祈禱大法〉3b,《正統道藏》涵芬樓版.	□日田儿碎	魖 T13-403F
61	T13-4036	《道法會元》卷112〈帝令寶珠五雷祈禱大法〉2b,《正統道藏》涵芬樓版.	□日田儿煜	魖 T13-4036
62	T13-4040	《道法會元》卷112〈帝令寶珠五雷祈禱大法〉2b,《正統道藏》涵芬樓版.	□日田儿婧	魖 T13-4040
63	T13-3F73 (04308)	《道法會元》卷 67〈雷霆玄論〉28b,《正統道藏》涵芬樓版.	□日田儿吒	魖 T13-3F73

64	T13-4043 (04378)	《道法會元》卷 95〈雷霆飛捷使者大法〉9a,《正統道藏》涵芬樓版.	□日田儿爾	魑 T13-4043
65	T13-3F77 (04318)	《道法會元》卷 67〈雷霆玄論〉28b,《正統道藏》涵芬樓版.	□日田儿吽	魁 T13-3F77
66	T13-4037 (04367)	《道法會元》卷 241〈雷霆三五火車靈官王元帥秘法〉1a,《正統道藏》涵芬樓版.	□日田儿善	魋 T13-4037
67	TB-6362	《道法會元》卷 112〈帝令寶珠五雷祈禱大法〉3a,《正統道藏》涵芬樓版.	□日田儿午	魁 TB-6362