

## Summary Report of Essential DVD Recordable Discs Patents (Japan)

Hitachi, Ltd.

Essential DVD Recordable Discs Patents (Japan)

Japanese Patent No.	Claim	Reference to DVD Specification
1,680,103	1	DVD-RAM Part 1, PH1-4, Table 5.1.4-1
1,771,375	1	DVD-RAM Commercially Essential Part 1, 3.1
1,950,909	1	DVD-RAM Commercially Essential Part 1. 3.1
1,982,419	1	DVD-RAM Part 1, 3.3.11
2,118,506	1	DVD-RAM Part 1, 5.2.1.1
2,141,267	1	DVD-RAM Part 1, Y. (Ver.2.1)
2,523,159	1	DVD-RAM Part 1, Table 5.4-1 (Ver.1.0)
2,600,638	1	DVD-RAM Part 1, Annex V
2,687,928	1	DVD-RAM Part 1, 5.2.1.1

2,702,517	3	DVD-RAM PH5-6, 8 5.2.3, 5.2.4
2,702,907	1	DVD-RAM Part1, 5.2.1.1
2,720,875	2	DVD-RAM Part 1, 5.2.1.1
2,784,229	1	DVD-RAM Part 1, 2.8.2 Table 5.4-1
2,788,022	1	DVD-RAM Part 1. 5.2.1.1
2,802,102	1	DVD-RAM Part 1, Table 5.4-1
2,826,493	1	DVD-RAM Part 1, 5.2.1.1
2,856,390	1	DVD-RAM Part 1, 5.2.1.1
2,859,599	1	DVD-R PH-27 Commercially Essential
2,875,999	1	DVD-RAM Part 1, 5.2.1.1
2,996,122	1	DVD-RAM Part 1, 3.3.5, Fig. 3.3-3
2,996,123	3	DVD-RAM Part 1, 3.4.5 Fig.3.4-3 3.4.13 Fig.3.4-7

2,996,125	1	DVD-RAM Part 1 3.3.5 Fig. 3.3-3 3.3.6 Fig.3.3-3
3,024,625	1	DVD-RAM Part 1, Y.1.3.14 Fig. Y. 1.3-10 (Ver. 2.1)
3,024,626	1	DVD-RAM Part 1. Y.1.3.8 Fig. Y.1.3-4 (Ver 2.1)
3,024,635	1	DVD-RAM Part 1, Y.1.3.14 (Ver.2.1)
3,024,649	1	DVD-RAM Part 1, 3.3.5, Fig. 3.4-3
3,024,650	1	DVD-RAM Part 1, 3.3.6 Fig.3.3-3
3,033,557	1	DVD-RAM Part 1. Fig. Table Y.1.3.8-1 Fig. Y.1.3-4 (Ver 2.1)
3,034,268	1	DVD-RAM Part 1, 5.1.3 Table 5.4-1
3,042,507	1	DVD-RAM Part 1, Y.1.3.14 (Ver.2.1)

3,107,297	1	DVD-RAM Part 1, 5.2.1.1
3,112,673	1	DVD-RAM PHX-Y1, 8, 18, 61 Y.3-2
3,162,234	1	DVD-RAM Fig.5.2.1.1-2
3,170,264	1	DVD-RAM Fig.5.2.1.1-1 Fig.5.2.1.1-2
3,170,265	1	DVD-RAM Fig.5.2.1.1-1 Fog.5.2.1.1-2 PH5-12 5.2.6
3,176,581	1	DVD-RAM PJ5-2, 5, 6 5.1.3 5.2.1.1
3,191,763	1	DVD-RAM/-RW/-R PH-51-53, 61
3,204,533	1	DVD-RAM/-RW/-R PH5-5, 6, 9, 15, 17
3,220,091	1	DVD-RAM Fig.5.2.1.1-1 Fig.5.2.1.1-2
3,220,127	1	DVD-RAM Fig.5.2.1.1-1 Fig.5.2.1.1-2
3,230,053	1	DVD-RAM PHX-Y1, 16, 18 Fig. Y1.3-10
3,260,341	1	DVD-RAM PH5-2, 5 5.1.3 5.2.1.1
3,285,029	1	DVD-RAM/-RW VR4-43, 44 4.3.3.3.1
3,296,246	13	DVD-RAM PH5-40, 42, 52

3,313,562	1	DVD-RAM PHX-Y10, 16 Y.1.3.8, 1.3.14
3,324,574	1	DVD-RAM Fig 3-3, 28, 37 Fig.3.4-3
3,324,575	1	DVD-RAM PHX-Y2, 11, 16, 28 Fig. Y.1.3-10
3,333,743	1	DVD-RAM Fig.5.2.1.1-1 Fog.5.2.1.1-2
3,339,841	1	DVD-RAM PH5-40 Table 5.4-1
3,341,722	1	DVD-RAM PH1-2 PH3-37, 41 Fig.3.4-3
3,341,724	1	DVD-RAM PH1-2 PH3-37, 41 Fig.3.4-3
3,356,991	1	DVD-RAM/-RW VR4-43, 45 4.3.3.3 4.3.3.3.2
3,358,059	1	DVD-RAM PHX-Y1, 16, 18 Fig. Y1.3-10
3,358,060	1	DVD-RAM PHX-Y1, 16, 18 Fig. Y1.3-10
3,358,064	1	DVD-RAM PHX-Y1, 16, 18 Fig. Y1.3-10
3,358,263	1	DVD-RAM PHX-Y2, 11, 16, 28 Fig. Y.1.3-10
3,358,621	1	DVD-RAM PHX-Y2, 11, 16, 28 Fig. Y.1.3-10

3,358,622	1	DVD-RAM PHX-Y2, 11, 16, 28 Fig. Y.1.3-10
3,358,727	1	DVD-RAM PHX-Y1 Y.1.1.1
3,359,916	1	DVD-RAM PHX-Y1, 8, 16, 18 Fig.Y3-1
3,359,917	1	DVD-RAM PHX-Y1, 8, 16, 18 Fig.Y3-1
3,367,017	1	DVD-RAM PHX-Y1, 16, 18 Fig. Y1.3-10
3,367,019	1	DVD-RAM PHX-Y1, 16, 18 Fig. Y1.3-10 Commercially Essential
3,380,547	1	DVD-RAM Fig.5.2.1.1-1
3,381,628	1	DVD-RAM/-RW/-R PH-50, 51 Fig.3.2.1-1 Fig.3.2.4-1
3,384,325	1	DVD-RAM/-RW/-R PH-40, 47, 49
3,489,538	1	DVD-RW/-R 3.2.9 Figure 3.2.9-1 Table 3.2.9-1 3.3 Figure 3.3-2 3.3.2 DVD-RAM 3.3 5.2.11.9 Figure 5.2.11.9-1 Table 5.2.11.9-1 Figure 5.3-2 5.3.3

**Panasonic Electric Industrial Co., Ltd.**  
**Essential DVD Recordable Discs Patents (Japan)**

Japanese Patent No.	Claim	Reference to DVD Specification
1,678,403	1	DVD-RAM Part 1, Fig.3.1-1, Fig.3 3-3 3.3.6 3.3.7
1,853,783	1	DVD-RAM Part 1, Table 5.4-1 5.7.1.9
1,956,987	1	DVD-RAM Part 1, 5.2.1.1 5.2.1.2 5.2.11.2
2,026,348	1	DVD-RAM Part 1, 5.3.3
2,616,596	2	DVD-RAM Part 1, Fig.2.4-1 2.4.7 Fig.2.5.1-1
2,633,817	1	DVD-RAM Part 1, Fig.5.2.1.1-2 5.1.5
2,638,248	5	DVD-RAM Part 1, 1.2 2.5.2 5.2.11.7 5.2.11.9
2,650,263	1	DVD-RAM Part 1, 5.2.1.1 5.2.4

2,669,414	1	DVD-RAM Commercially Essential
2,697,555	1	DVD-RAM Part 1, 2.7.2.3 1. 2 Commercially Essential
2,715,674	9	DVD-RAM Part 1, 5.2.10 5.3
2,723,832	1	DVD-RAM Part 1, 5.2.11 5.2.11.6 Fig. 5.2.11.6-1
2,730,675	1	DVD-RAM Part 1. Fig.3-1 3.3.2 3.3.3
2,788,789	1	DVD-RAM Part 1, 5.2.1.1
2,863,052	1	DVD-RAM Part 1, 5.2.11.9 Fig. 5.2.11.9-1 Table 5.2.11.9-1 5.3
2,898,886	1	DVD-RAM Part 1. Fig.3-1 3.3.6
2,904,140	1	DVD-RAM Part 1, 1.2 2.5.2 5.2.11.7 5.2.11.9



2,997,467	1	DVD-RAM Part 1. Fig.Y1.1-1 Y.1.3.14
2,997,468	1	DVD-RAM Part 1. Fig.Y1.3-11
3,024,120	1	DVD-RAM Part 1, Table 5.7.1.5.1-1 BP503, 507
3,025,500	1	DVD-RAM Part 1 5.2.1.1 5.2.2
3,025,501	1	DVD-RAM Part 1, Fig.5.2.1.1-1 5.2.1.1-2
3,029,835	1	DVD-RAM Part 1, 5.5.5 Table 5.5.4-1 Annex R R 3.1
3,029,836	1	DVD-RAM Part 1, Table 5.4-1 Table 5.5.4-1 Annex R Part 2 2.1, 2.3.2.4
3,029,837	1	DVD-RAM Part 1, Table 5.4-1 5.6.2
3,031,241	2	DVD-RAM Part 1. 3.4.9

3,031,379	1	DVD-RAM Part 1, Fig.5.2.1.1-1 5.2.8 5.2.9 5.2.13 5.2.15
3,031,380	1	DVD-RAM Part 1, Fig.5.2.1.1-1 5.2.8 5.2.9 5.2.13 5.2.15
3,031,381	1	DVD-RAM Part 1, Fig.5.2.1.1-1 5.2.14
3,031,382	1	DVD-RAM Part 1, Fig.5.2.1.1-1 5.2.2 5.2.9 5.2.13
3,033,063	1,3	DVD-RAM Part 1. Fig.3.1-1 3.3.12
3,035,869	1	DVD-RAM Part 1, 5.5.5 Table 5.5.5-1 5.6.5 Table 5.6.5-1
3,039,545	1	DVD-RAM Part 1 3.4.9
3,039,546	1	DVD-RAM Part 1. 3.4.9

3,039,547	1	DVD-RAM Part 1 3.4.9 3.4.16
3,039,548	1	DVD-RAM Part 1 3.4.16 3.4.9
3,039,549	1	DVD-RAM Part 1 Fig.3.1-2 3.4.9 3.4.16
3,040,779	1	DVD-RAM Part 1, 5.5.3 5.6.3
3,042,780	1.3	DVD-RAM Part 1, Annex V 5.7.1.5.1 (BP16)
3,044,023	1,6	DVD-RAM Part 1. Fig.Y1.1-1 Fig.Y1.3-10 Y.1.3-14
3,059,026	1	DVD-RAM Part 1, 5.2.1.1 5.2.4
3,059,168	1	DVD-RAM Part 1, Fig.5.2.1.1-1 5.2.6
3,059,169	1	DVD-RAM Part 1, Fig.5.2.1.1-1 5.2.6
3,059,172	1	DVD-RAM Part 1, 5.2.1.1 5.2.4

3,062,500	1	DVD-RAM Part 1, Fig.5.2.1.1-1 5.2.12
3,062,501	1	DVD-RAM Part 1, Fig.5.2.1.1-1 5.2.6
3,063,765	1	DVD-RAM Part 1, Fig.5.2.1.1-1 5.2.2 5.2.9
3,068,093	1	DVD-RAM Part 1, 5.2.1.1 5.2.1.2 5.2.11.2
3,068,095	1	DVD-RAM Part 1, 5.5.5 Table 5.5.4-1 Annex R R 3.1
3,068,096	1	DVD-RAM Part 1, 5.5.5 Table 5.5.4-1 Annex R R 3.1
3,068,102	1	DVD-RAM Part 1, Table 5.4-1 Table 5.5.4-1 Table 5.6.4-1
3,068,103	1	DVD-RAM Part 1, Table 5.4-1 5.5.5 5.6.2

3,069,722	3	DVD-RAM Part 1, Fig.5.2.1.1-1 5.2.8 5.2.9
3,069,737	3	DVD-RAM Part 1, Fig.5.2.1.1-1 5.2.2 5.2.9
3,073,204	1	DVD-RAM Part 1, Fig.5.2.1.1-1 5.2.1.1-2 5.2.4
3,073,205	1	DVD-RAM Part 1, Fig.5.2.1.1-1 5.2.1.1-2
3,075,477	1,2	DVD-RAM Part 1, 5.5.1, 5.5.3, 5.6.3, 5.6.5
3,076,033	1	DVD-RAM Part 1, 2.8.1.3.1 2.8.1.3.3 Table 5.7.1.5.1-1
3,076,036	1	DVD-RAM Part 1, 2.8.1.3.1 2.8.1.3.3 Table 5.7.1.5.1-1
3,076,037	1	DVD-RAM Part 1, 2.8.1.3.1 2.8.1.3.3 Table 5.7.1.5.1-1
3,076,038	1	DVD-RAM Part 1, 2.8.1.3.1 2.8.1.3.3 Table 5.7.1.5.1-1

3,085,534	1	DVD-RAM Part 1. Y1.3.5
3,085,537	1	DVD-RAM Part 1. Y.1.4.5 Y.1.4.6 Fig.Y.1.4-3
3,089,599	1.5	DVD-RAM Part 1, Annex V V 2, V 4
3,089,600	1	DVD-RAM Part 1, Annex V V 2 5.7.1.1
3,090,316	1	DVD-RAM Part 1, Table 5.4.1 5.6.1 Table 5.6.5-1
3,090,317	1	DVD-RAM Part 1, Table 5.4.1 5.6.1 Table 5.6.5-1
3,090,318	1	DVD-RAM Part 1, Table 5.4-1 5.6.1 Table 5.6.5-1
3,090,319	1	DVD-RAM Part 1, Table 5.4-1 5.6.1 Table 5.6.5-1
3,090,320	1	DVD-RAM Part 1, Table 5.4-1 5.6.1 Table 5.6.5-1

3,090,321	1	DVD-RAM Part 1, Table 5.4-1 5.6.1 Table 5.6.5-1
3,090,322	1	DVD-RAM Part 1, Table 5.4-1 5.6.1 Table 5.6.5-1
3,090,660	1	DVD-RAM Part 1, Table 5.4-1 5.6.1 Table 5.6.5-1
3,090,661	1	DVD-RAM Part 1 Fig.5.2.1.1-1 5.2.1.1-2 5.2.2 5.2.4
3,090,662	1	DVD-RAM Part 1 Fig.5.2.1.1-1 5.2.1.1-2 5.2.4
3,092,707	1.3	DVD-RAM Part 1, 5.2.1.1 5.2.1.2 5.2.11.2
3,092,708	1	DVD-RAM Part 1, 5.2.1.1 5.2.1.2 5.2.11.2 5.7.1.7
3,097,849	1	DVD-RAM Part 1 5.7.1.5.1 (BP 32)

3,097,850	1	DVD-RAM Part 1 3.1.2 5.7.1.5.1 (BP 32)
3,097,851	1	DVD-RAM Part 1 3.1.2 3.4.9 5.7.1.5.1
3,097,916	1	DVD-RAM Part 1, Annex V V 2 5.7.1.1
3,097,917	1	DVD-RAM Part 1, Annex V 5.7.1.5 5.7.1.5.1
3,097,918	1	DVD-RAM Part 2, Table 3.6.3-1 3.6.3-2 Table 3.10.2-1 3.10.2-2
3,097,959	1	DVD-RAM Part 1, Table 5.4-1 Annex R.3.1 PH 1-9 Table 5.5.4-1
3,098,011	1	DVD-RAM Part 1, Table 5.4-1 Annex R R.3.1 PH 1-9



3,098,237	1	DVD-RW Part 2 2.8 3.6.1 Table 3.6.1-1 3.6.2 3.6.3 Table 3.6.3-1 3.6.3-2 3.10.2 Table 3.10.2-1 3.10.2-2
3,098,258	1	DVD-RAM Ver. 2 5.1.1 5.2.1.1 5.2.1.2
3,099,009	1	DVD-RAM Part 1, 2.8.1.3.1 2.8.1.3.3 Table 5.7.1.5.1-1 5.7.1.10
3,099,010	1	DVD-RAM Part 1, 2.8.1.3.1 2.8.1.3.3 Table 5.7.1.5.1-1 5.7.1.11.3
3,100,961	1	DVD-RAM 2.8.1.3.3 2.8.1.3.4 2.8.2 Table 5.7.1.5.1-1
3,137,964	1	DVD-RAM PHX-Y16, 18, 61 Fig. Y.1.3-11 Y 3-2
3,137,965	1	DVD-RAM PHX-Y16, 18, 61 Fig. Y.1.3-11 Y 3-2

3,143,454	1	DVD-R Part 1 3.4.1 Annex W
3,143,454	1	DVD-RW Part 1 3.4.1 Annex X
3,143,455	1	DVD-R Part 1 3.4.1 Annex W
3,143,455	1	DVD-RW Part 1 3.4.1 Annex X
3,153,214	2	DVD-RAM PHX-Y16, 18, 61 Fig. Y 1.3-10 Fig. Y.3.2
3,153,215	5	DVD-RAM PHX-Y16, 18, 61 Fig. 1.3-10 Fig. 1.3-11 Fig. 3-1
3,160,298	7	DVD-RAM PH5-1, 4, 5, 7, 92 Fig. 5.2.1.1-2 Fig.5.7.1.7-1
3,167,289	3	DVD-R Part 1 3.2 3.2.1 3.2.6
3,167,289	3	DVD-RW Part 1 3.2 3.2.1 3.2.6

3,167,302	3	DVD-R Part 1 3.2 3.2.1 3.2.6
3,167,302	3	DVD-RW Part 1 3.2 3.2.1 3.2.6
3,169,365	1	DVD-RW Part 1, 3.4.1.1 Fig. 3.4.1.1-1 3.4.1.2 Fig 3.4.1.2-1 3.4.1.4. Fig 3.4.1.4-1
3,169,365	1	DVD-R Part 1, 3.4.1.1 Fig. 3.4.1.1-1 3.4.1.3 Fig 3.4.1.3-1 3.4.1.4. Fig 3.4.1.4-1
3,169,366	1	DVD-R Part 1 4.2.1 4.2.3 Annex W
3,169,366	1	DVD-RW Part 1 4.2.1 4.2.3 Annex X
3,170,502	1	DVD-R FS2-3 Fig.4.1.4-1 FS3-1, 7

3,170,503	3	DVD-R FS2-3 Fig.4.1.4-1 FS3-1, 7
3,170,504	8	DVD-R PHX-P2, 4.5.7 Fig. P.1-2 PH3-29, 40 Table 3.4.1.2.2-1 Table 3.4.1.8-1
3,171,584	1	DVD-RAM FS3-44 3.8.2 FSX-C1
3,171,585	1	DVD-R FS3-44 3.8.2 FSX-C1
3,171,586	1	DVD-R FS3-44 3.8.2 FSX-C1
3,173,509	1	DVD-RW Part 1, 3.4.1.1 Fig. 3.4.1.1-1 3.4.1.3 Fig 3.4.1.3-1 3.4.1.4. Fig 3.4.1.4-1 4.1.4.2
3,173,604	1	DVD-R Part 1, 3.4.1.1 Fig. 3.4.1.1-1 3.4.1.2 Fig 3.4.1.2-1 3.4.1.4. Fig 3.4.1.4-1

3,173,604	1	DVD-RW Part 1, 3.4.1.1 Fig. 3.4.1.1-1 3.4.1.3 Fig 3.4.1.3-1 3.4.1.4. Fig 3.4.1.4-1
3,173,605	1	DVD-RW Part 1, 3.4.1.1 Fig. 3.4.1.1-1 3.4.1.3 Fig 3.4.1.3-1 3.4.1.4. Fig 3.4.1.4-1 4.1.4.2
3,173,607	1	DVD-R Part 1, 3.4.1.1 Fig. 3.4.1.1-1 3.4.1.2 Fig 3.4.1.2-1 3.4.1.4. Fig 3.4.1.4-1
3,173,607	1	DVD-RW Part 1, 3.4.1.1 Fig. 3.4.1.1-1 3.4.1.3 Fig 3.4.1.3-1 3.4.1.4. Fig 3.4.1.4-1
3,183,874	4	DVD-R PHX-P2, 4.5.7 Fig. P.1-2 PH3-29, 40 Table 3.4.1.2.2-1 Table 3.4.1.8-1
3,209,222	3	DVD-RAM PH 5-39, 68 Table 5.4-1 Annex V

3,219,393	1	DVD-RAM 5.1.1 5.1.1.1 5.2.2 5.2.3
3,271,965	1	DVD-RW PHX-X1
3,284,252	1	DVD-RAM 2.8.1.3.3 Table 2.8.1.3.3-1
3,360,631	2	DVD-RAM/-RW/-R PH-40. 47 Fig. 3.2.1-1 Fig. 3.2.7-1 DVD-RAM PH 5-15, 20 Fig. 5.2.11.1-1 Fig.5.2.11.7-1

**Mitsubishi Electric Corporation**  
**Essential DVD Recordable Discs Patents (Japan)**

Japanese Patent No.	Claim	Reference to DVD Specification
3,027,818	1	DVD-RAM Part 1, 5.2.1.1 Fig.5.2.1.1-1 5.2.1.1-2
3,030,303	1	DVD-RAM Part 1, Table 5.4-1 5.2.11
3,061,802	1	DVD-RAM Part 1, 5.2.1.1 5.2.4
3,063,596	8	DVD-RAM Part 1, 5.1.1 5.1.3 5.2.1.1
3,063,598	1	DVD-RAM Part 1, 5.2.1.1 5.2.3
3,063,613	1	DVD-RAM Part 1, 5.2.1.1 Table 5.4-1
3,063,641	1	DVD-RAM Part 1(Ver. 2) 5.1.1 5.7.1.7 Fig.5.7.1.7-1
3,070,467	1	DVD-RAM Part 1, Table 5.4-1. 5.2.11

3,073,744	1	DVD-RAM Part 1, Fig.2.7.1.3-5 5.2.1.1 5.2.4
3,073,746	1	DVD-RAM Part 1(Ver. 2) 5.1.1 5.7.1.7 Fig.5.7.1.7-1
3,078,686	1	DVD-RAM Part 1, 5.2.1.1 Fig.5.2.1.1-1 5.2.4 5.2.11 5.2.11.2 5.5.5 Table 5.5.5-1
3,085,536	1.2.6	DVD-RAM Part 1, 5.1.3 5.1.4 5.2.1.1 5.2.4
3,085,536	6	DVD-R Part 1, 3.1.4 3.2.2 4.2.3.2
3,085,536	6	DVD-RW Part 1, 3.1.4 3.2.2 4.2.3.2
3,085,538	3	DVD-RAM Part 1, Table 5.4-1 5.2.11 Table 5.5.5-1



3,092,510	1	DVD-RAM Part 1, 5.2.1.1 5.2.4 Annex L (2)
3,317,947	1, 2	DVD-RAM PH5-1, 2, 3 40, 47 Table 5.5.5
3,363,859	1	DVD-RAM/-RW/-R PH5-5 5.2 Table 5.5.5-1
3,363,860	1	DVD-RAM/-RW/-R PH5-63, 65 5.7.1.5.1

**Samsung Electronics Co., Ltd.**  
**Essential DVD Recordable Discs Patents (Japan)**

Japanese Patent No.	Claim	Reference to DVD Specification
3,302,338	1	DVD-RAM PHX-Y40 Y.1.4.14 PHX-Y52, 53 Fig. 1.4-10 Fig. 1.4-11 PHX-Y60

**Sanyo Electric Co., Ltd.**  
**Essential DVD Recordable Discs Patents (Japan)**

Japanese Patent No.	Claim	Reference to DVD Specification
3,071,143	1	DVD-RAM/-RW/-R Fig. 2.1-1 5.1.1 Table 5.4-1 Fig.5.7.1.1-1 Fig.5.7.1.5-1 Table 5.7.1.5.1-1
3,177,503	1, 2	DVD-RAM/-RW Fig. 2.1-1 5.1.1 Table 5.4-1 Fig.5.7.1.1-1 Fig.5.7.1.5-1 Table 5.7.1.5.1-1
3,177,504	1, 2	DVD-RAM Fig. 2.1-1 5.1.1 Table 5.4-1 Fig.5.7.1.1-1 Fig.5.7.1.5-1 Table 5.7.1.5.1-1
3,177,505	1, 2	DVD-RAM/-RW/-R Fig. 2.1-1 5.1.1 Table 5.4-1 Fig.5.7.1.1-1 Fig.5.7.1.5-1 Table 5.7.1.5.1-1

**Sharp Corporation**  
**Essential DVD Recordable Discs Patents (Japan)**

Japanese Patent No.	Claim	Reference to DVD Specification
2,868,682	1	DVD-RAM 2.6, 2.6.1, 2.6.3 5.2, 5.2.1, 5.2.1.1 Fig.5.2.1.1-2 Commercially Essential
2,878,574	1	DVD-RAM 2.6, 2.6.1, 2.6.3 5.2, 5.2.1, 5.2.1.1 Fig.5.2.1.1-2
3,124,958	1, 2	DVD-RAM 2.6, 2.6.1, 2.6.3 5.2, 5.2.1, 5.2.1.1 Fig.5.2.1.1-2 Commercially Essential
3,124,961	1, 2	DVD-RAM 2.6, 2.6.1, 2.6.3 5.2, 5.2.1, 5.2.1.1 Fig.5.2.1.1-2

**Toshiba Corporation**  
**Essential DVD Recordable Discs Patents (Japan)**

Japanese Patent No.	Claim	Reference to DVD Specification
2,704,107	1	DVD-RAM Part 1, 1.2 Commercially Essential
2,786,810	1	DVD-RAM Part 1, 5.2.11.9
2,810,028	1	DVD-RAM Part 1, 5.2.11.1 5.7.1.1 5.7.1.3
2,810,031	1	DVD-RAM Part 1, 5.2.11.1 5.7.1.1 5.7.1.3
2,816,120	1	DVD-RAM Part 1, 3.1 3.3.9 3.4.9
2,835,321	1	DVD-RAM Part 1, 1.2
2,954,083	1	DVD-RAM Part 1, 5.2.1.1 5.2.3
2,954,128	1	DVD-RAM Part 1, 5.2.1.1 5.2.2 5.2.3

2,954,129	1	DVD-RAM Part 1, 5.2.1.1 5.2.2 5.2.3
2,954,130	1	DVD-RAM Part 1, 5.2.1.1 5.2.3
2,954,132	1	DVD-RAM Part 1, 5.2.1.1 5.2.2 5.2.3
2,954,133	1	DVD-RAM Part 1, 5.2.1.1 5.2.2 5.2.3
2,954,135	1	DVD-RAM Part 1, 5.2.1.1 5.2.2 5.2.3
3,071,828	13	DVD-RAM Part 1, 5.2.11.7 Fig. 5.2.11.7-1
3,080,902	1	DVD-RAM Part 1, 5.2.1.1 5.2.4 Annex L
3,378,573	1	DVD-RW PH4-1 FS2-2, 4
3,389,086	2	DVD-RW PH4-1 FS2-2, 4 FS3-15 VR3-35 VRX-H8

3,389,087	1	DVD-RW PH4-1 FS2-2, 4 VR-35~37
3,389,088	1	DVD-RW PH4-1 FS2-2, 4 VRX-H4 FSX-C5, C7
3,389,089	2	DVD-RW PH4-1 FS2-2, 4 VRX-H5~9
3,389,228	1	DVD-RW PH4-1 FS2-2, 4 FS3-18, 34, 35, 44
3,389,229	1	DVD-RW PH4-1 FS2-2, 4 FS3-44
3,389,230	1	DVD-RW PH4-1 FS2-2, 4, 33, 35
3,389,231	4	DVD-RW PH4-1 FS2-2, 4 VR3-9, 10, 22 VR4-31
3,389,232	1	DVD-RW PH4-1 FS2-2, 4 VR4-35
3,389,238	2	DVD-RW PH4-1 FS2-2, 4 FSX-C4, 5 VRX-H8, 9
3,593,075	1	DVD-R Part 2 FS 1.3.8, 3.2.2, 3.6.1, 3.8.2, 3.10 Figure 3.2.2-1 Table 3.6.1-1, 3.10.2-1, 3.10.2-2

3,889,788	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.7.1, 3.7.2, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.7.1-1, 3.10.2-1, 3.10.2-2
3,889,793	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2
3,889,797	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2 Figure 2.3.1-1
3,889,798	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2 Figure 2.3.1-1
3,889,799	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2
3,889,800	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2 Figure 2.3.1-1
3,889,801	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2 Figure 2.3.1-1
3,889,803	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2
3,889,804	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2
3,889,805	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2
3,896,148	1	DVD-RAM Part 2 FS 1.3.7(2), 3.3.1, 3.6.1, 3.7.2, 3.8.2 Table 3.3.1-1, 3.6.1-1, 3.7.1-1, 3.7.2-1, 3.10.2-1, 3.10.2-2
3,898,738	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2 Figure 2.3.1-1



3,898,739	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2 Figure 2.3.1-1
3,898,740	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.7.1-1, 3.10.2-1, 3.10.2-2 Figure 2.3.1-1
3,898,751	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.7.1, 3.7.2, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.7.1-1, 3.10.2-1, 3.10.2-2
3,898,752	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2
3,906,216	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.7.1, 3.7.2, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.7.1-1, 3.10.2-1, 3.10.2-2
3,906,235	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.7.1, 3.7.2, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.7.1-1, 3.10.2-1, 3.10.2-2 Figure 2.2-1, 2.3.1-1
3,906,239	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.6.3-1, 3.6.3-2, 3.6.5-1, 3.10.2-1, 3.10.2-2
3,906,241	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.7.1, 3.7.2, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.7.1-1, 3.10.2-1, 3.10.2-2
3,906,242	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.7.1, 3.7.2, 3.8.2, 3.10.1
3,906,243	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.7.1-1, 3.10.2-1, 3.10.2-2 Figure 2.3.1-1
3,906,261	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.6.5-1, 3.7.1-1, 3.10.2-1, 3.10.2-2
3,906,264	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2
3,906,266	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.7.1, 3.7.2, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.7.1-1, 3.10.2-1, 3.10.2-2

3,906,267	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.7.1, 3.7.2, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.7.1-1, 3.10.2-1, 3.10.2-2
3,906,269	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2 Figure 2.3.1-1
3,906,270	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.7.1, 3.7.2, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.7.1-1, 3.10.2-1, 3.10.2-2 Figure 2.3.1-1
3,906,271	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2
3,906,272	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2
3,906,273	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.7.1, 3.7.2, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.7.1-1, 3.10.2-1, 3.10.2-2
3,906,274	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.7.1, 3.7.2, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.7.1-1, 3.10.2-1, 3.10.2-2
3,906,275	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2 Figure 2.3.1-1
3,906,276	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.7.1, 3.7.2, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.7.1-1, 3.10.2-1, 3.10.2-2 Figure 2.3.1-1
3,906,276	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.7.1, 3.7.2, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.7.1-1, 3.10.2-1, 3.10.2-2 Figure 2.3.1-1
3,906,277	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2
3,906,278	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2

3,906,296	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2
3,906,305	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.6.3-1, 3.6.3-2, 3.10.2-1, 3.10.2-2
3,906,306	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.6.5-1, 3.10.2-1, 3.10.2-2
3,906,306	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.6.5-1, 3.10.2-1, 3.10.2-2
3,906,308	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2
3,906,308	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2
3,906,311	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.10.2-1, 3.10.2-2
3,906,312	1	DVD-R Part 2 FS 1.3.8 (2), 3.6.1, 3.7.1, 3.7.2, 3.8.2, 3.10.1 Tables 3.6.1-1, 3.7.1-1, 3.10.2-1, 3.10.2-2

**Victor Company of Japan, Ltd.**  
**Essential DVD Recordable Discs Patents (Japan)**

Japanese Patent No.	Claim	Reference to DVD Specification
2,023,593	1	DVD-R/-RW 4.2.1 Fig. 4.2.1-1 Table 4.2.1-1
2,087,196	1	DVD-R Part 2 Fig. 2,3-1 Table 2.8.1-1, Table A14-1
2,532,906	1	DVD-RAM Part 1, 5.2.11.9
2,532,906	1	DVD-R Part 1, 3.2.1, 3.2.2, 3.2.9
2,532,906	1	DVD-RW Part 1, 3.2.1, 3.2.2, 3.2.9
2,541,847	1,2	DVD-R Commercially Essential
2,580,820	1	DVD-R Commercially Essential
2,776,453	2	DVD-RAM Commercially Essential for manufacturing emboss pits of RAM disc.
2,809,043	1	DVD-RAM Part 1. 2.7.3.3 Annex L
2,924,880	1	DVD-RAM Part 1, 2.7.3.3 Annex L
2,927,163	11	DVD-RAM Part 1, 5.2.11.6

2,927,163	11	DVD-R Part 1, 3.2.6
2,927,163	11	DVD-RW Part 1, 3.2.6
2,947,395	1	DVD-R/-RW Table 4.5.4-1 VOBU_SRI
3,001,076	1	DVD-RAM Commercially Essential Part 1, 2.7.4.1
3,001,077	1	DVD-RAM Commercially Essential Part 1, 2.7.4.1
3,033,513	1	DVD-R Part 1, 3.2.6
3,061,098	1	DVD-RAM Fig. 2.7.1.3-8 Fig. 5.2.1.1-2
3,090,111	1-4	DVD-RAM Part 1, 5.1.4, 5.5.5
3,129,419	1,4,5	DVD-RW Commercially Essential
3,209,126	4	DVD-RAM PHX-V1 Annex V DVD-R PHX-W1 Annex W DVD-RW PHX-X1 Annex X
3,279,043	1	DVD-RAM PH 2-18 2.6.9 PH 5-60 Fig. 5.7.1.1-1 PH 5-40 Table 5.4-1

3,317,439	1	DVD-RAM PH5-19 5.2.11.6 DVD-RW PH3-8 3.2.6 DVD-R PH3-7 3.2.6
3,360,634	1	DVD-RAM PH5-19 5.2.11.6 DVD-RW PH3-8 3.2.6 DVD-R PH3-7 3.2.6
3,367,656	1	DVD-R/-RW 3.2.1 3.2.7 3.2.9 3.2.10
3,367,657	1	DVD-R/-RW 3.2.1 3.2.7 3.2.9 3.2.10
3,389,988	1	DVD-R/-RW Ver.1. 1 3.4.1.4 Fig. 3.4.1.4-1 Commercially Essential
3,389,989	1	DVD-R/-RW Ver.1. 1 3.4.1.4 Fig. 3.4.1.4-1 Commercially Essential
3,389,990	1	DVD-R/-RW Ver.1. 1 3.4.1.4 Fig. 3.4.1.4-1 Commercially Essential
3,389,991	1	DVD-R/-RW Ver.1. 1 3.4.1.4 Fig. 3.4.1.4-1 Commercially Essential

3,389,992	1	DVD-R/-RW Ver.1. 1 3.4.1 3.4.1.1 3.4.1.4 Table 3.4.1.4.1-1
3,389,993	1	DVD-R/-RW Ver.1. 1 3.4.1 3.4.1.1 3.4.1.4 Table 3.4.1.4.1-1
3,389,994	1	DVD-R/-RW Ver.1. 1 3.4.1 3.4.1.1 3.4.1.4 Table 3.4.1.4.1-1
3,389,995	1	DVD-R/-RW Ver.1. 1 3.4.1 3.4.1.1 3.4.1.4 Table 3.4.1.4.1-1
3,389,996	1	DVD-R/-RW Ver.1. 1 3.4.1 3.4.1.1 3.4.1.4 Table 3.4.1.4.1-1
3,389,997	1	DVD-R/-RW Ver.1. 1 3.4.1 3.4.1.1 3.4.1.4 Table 3.4.1.4.1-1
3,389,998	1	DVD-R/-RW Ver.1. 1 3.4.1 3.4.1.1 3.4.1.4 Table 3.4.1.4.1-1

3,389,999	1	DVD-R/-RW Ver.1. 1 3.4.1 3.4.1.1 3.4.1.4 Table 3.4.1.4.1-1
3,391,385	1	DVD-RW Ver.1. 1 3.4.1.4 Annex Y Commercially Essential
3,391,386	1	DVD-RW Ver.1. 1 3.4.1.4 Annex Y Commercially Essential
3,391,387	1	DVD-RW Ver.1. 1 3.4.1.4 Annex Y Commercially Essential
3,391,388	1	DVD-RW Ver.1. 1 3.4.1.4 Annex Y Commercially Essential
3,391,389	1	DVD-RW Ver.1. 1 3.4.1.4 Annex Y Commercially Essential
3,391,390	1	DVD-RW Ver.1. 1 3.4.1.4 Annex Y Commercially Essential
3,391,393	1	DVD-RW Ver.1. 1 3.4.1.4 Annex Y Commercially Essential



3,391,394	1	DVD-RW Ver.1. 1 3.4.1.4 Annex Y Commercially Essential
3,391,395	1	DVD-RW Ver.1. 1 3.4.1.4 Annex Y Commercially Essential
2, 138,621	1	DVD-R Part 1, 3.2.6
3, 082,699	1,2	DVD-RAM Part 1, 5.2.11.6
3, 082,699	1,2	DVD-R Part 1, 3.2.6
3, 082,699	1,2	DVD-RW Part 1, 3.2.6

**Panasonic/Mitsubishi**  
**Essential DVD Recordable Discs Patents (Japan)**

Japanese Patent No.	Claim	Reference to DVD Specification
3,103,505	1	DVD-RAM PH2-17 PH5-1~11 Fig.5.2.1.1-1

**Panasonic/Toshiba**  
**Essential DVD Recordable Discs Patents (Japan)**

Japanese Patent No.	Claim	Reference to DVD Specification
3,313,928	1	DVD-RAM 3.3 3.3.1 Table 3.3-1 3.3.2 Table 3.3-2

**Hitachi/Panasonic/Toshiba  
Essential DVD Recordable Discs Patents (Japan)**

Japanese Patent No.	Claim	Reference to DVD Specification
3,339,539	4	DVD-RAM/-RW/-R 3.3, 3.3-1 Fig. 3.3-1 3.3.2 Fig.3.3-2 Table 3.3-1 3,3-2