```json
{
  "DocumentId": "66c585ad-44ad-4598-8f55-c41fc3ceb5f1",
  "FileName": "SECURED_20251013_215301_fiche article rempli.pdf",
  "User": "Mon Test",
  "Timestamp": "2025-10-13T19:53:01.5971875Z",
  "Steps": [
    {
      "StepNumber": 1,
      "Action": "✅ Validation PDF réussie",
      "CompletedAt": "2025-10-13T19:53:01.5997088Z"
    },
    {
      "StepNumber": 2,
      "Action": "✅ Sauvegarde fichier original sécurisée",
      "CompletedAt": "2025-10-13T19:53:02.1005934Z"
    },
    {
      "StepNumber": 3,
      "Action": "✅ Hash SHA256 original: 6a8440a02a91f791...",
      "CompletedAt": "2025-10-13T19:53:02.6007172Z"
    },
    {
      "StepNumber": 4,
      "Action": "✅ Métadonnées sensibles supprimées",
      "CompletedAt": "2025-10-13T19:53:03.1007181Z"
    },
    {
      "StepNumber": 5,
      "Action": "🔍 Watermark invisible et empreinte numérique ajoutés",
      "CompletedAt": "2025-10-13T19:53:03.6007186Z"
    },
    {
      "StepNumber": 6,
      "Action": "🔢 Hash généré pour 0 pages individuellement",
      "CompletedAt": "2025-10-13T19:53:04.1007204Z"
    },
    {
      "StepNumber": 7,
      "Action": "🌍 Géolocalisation et métadonnées contextuelles enregistrées",
      "CompletedAt": "2025-10-13T19:53:04.6007207Z"
    },
    {
      "StepNumber": 8,
      "Action": "🌐 Restriction IP enregistrée: 127.0.0.1",
      "CompletedAt": "2025-10-13T19:53:05.100721Z"
    },
    {
      "StepNumber": 9,
      "Action": "📄 Filigrane unique appliqué sur chaque page",
      "CompletedAt": "2025-10-13T19:53:05.6007213Z"
    },
    {
      "StepNumber": 10,
      "Action": "📸 Protection contre capture d'écran activée",
      "CompletedAt": "2025-10-13T19:53:06.1007219Z"
    },
    {
      "StepNumber": 11,
      "Action": "✅ Watermark de sécurité principal appliqué",
      "CompletedAt": "2025-10-13T19:53:06.6007223Z"
    },
    {
      "StepNumber": 12,
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      "Action": "🖨️ Watermark d'impression ajouté (visible uniquement imprimé)",
      "CompletedAt": "2025-10-13T19:53:07.1007225Z"
    },
    {
      "StepNumber": 13,
      "Action": "✅ Signature numérique PAdES appliquée",
      "CompletedAt": "2025-10-13T19:53:07.6007227Z"
    },
    {
      "StepNumber": 14,
      "Action": "🧬 Signature biométrique: BIO-SIG-8BIk5WlZSwgN...",
      "CompletedAt": "2025-10-13T19:53:08.100723Z"
    },
    {
      "StepNumber": 15,
      "Action": "🔐 Protection par mot de passe - PDF verrouillé contre modification",
      "CompletedAt": "2025-10-13T19:53:08.6007233Z"
    },
    {
      "StepNumber": 16,
      "Action": "🧬 Chaîne de hash blockchain générée (5 blocs)",
      "CompletedAt": "2025-10-13T19:53:09.1007235Z"
    },
    {
      "StepNumber": 17,
      "Action": "✅ Horodatage RFC3161: RFC3161-2025-10-13T19:52:53.441Z-NONCE:
65e50d89c6644fb3-MOCK",
      "CompletedAt": "2025-10-13T19:53:09.6007237Z"
    },
    {
      "StepNumber": 18,
      "Action": "🔲 QR Code de vérification généré",
      "CompletedAt": "2025-10-13T19:53:10.1007243Z"
    },
    {
      "StepNumber": 19,
      "Action": "✅ Images de prévisualisation générées",
      "CompletedAt": "2025-10-13T19:53:10.6007245Z"
    },
    {
      "StepNumber": 20,
      "Action": "✅ Hash final calculé et vérifié",
      "CompletedAt": "2025-10-13T19:53:11.1007247Z"
    },
    {
      "StepNumber": 21,
      "Action": "✅ PDF sécurisé déplacé vers le coffre-fort numérique",
      "CompletedAt": "2025-10-13T19:53:11.6007249Z"
    }
  ],
  "DeviceInfo": {
    "OS": "Microsoft Windows NT 10.0.26100.0",
    "MachineName": "LAPTOP-RV9E34LB",
    "ProcessorCount": 8,
    "UserDomain": "LAPTOP-RV9E34LB",
    "Framework": "8.0.8"
  },
  "SecurityLevel": "MAXIMUM v3.0",
  "Compliance": [
    "RGPD",
    "ISO27001",
    "eIDAS",
    "PAdES",
```

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    "RFC3161"
  ],
  "TotalOperations": 21
}
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